Georgia
Poverty Update

January 10, 2002

Poverty Reduction and Economic Management Unit
Europe and Central Asia Region

Document of the World Bank
CURRENCY EQUIVALENTS
(Exchange Rate Effective January, 2002)
Currency Unit = Lari
Lari = US$0.48
US$1.0 = 2.06 Lari

ABBREVIATIONS AND ACRONYMS

CAS Country Assistance Strategy
CIS Commonwealth of Independent States
CPI Consumer Price Index
EBRD European Bank for Reconstruction & Development
EU European Union
FAO Food and Agriculture Organization
FDI Foreign Direct Investment
FRCRC Federation of Red Cross and Red Crescent
FSU Former Soviet Union
GDP Gross Domestic Product
GEL Georgian Lari
IDP Internally Displaced Persons
IMF International Monetary Fund
I-PREGP Interim Poverty Reduction and Economic Growth Strategy Paper
MoF Ministry of Finance
NGO Non-Governmental Organization
PPP Purchasing Power Parity
PRGF Poverty Reduction and Growth Facility
PREGP Poverty Reduction and Economic Growth Strategy Paper
SGHH Survey of Georgian Households
SIF Social Investment Fund
SDS State Department of Statistics
SME Small and Medium Enterprises
UNDP United Nations Development Program
UNHCR United Nations High Commissioner for Refugees
USAID United States Agency for International Development
USD United States Dollar
VAT Value Added Tax
WB World Bank
WFP World Food Program
WTO World Trade Organization
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AKNOWLEDGEMENT

This study was prepared by a joint World Bank-State Department of Statistics of Georgia (SDS) team. We thank our Georgian counterparts, especially the Chairman of SDS T. Beridze, his Deputy I. Archvadze, and the SDS Department Heads R. Tsakadze and N. Kapanadze for their hospitality and for making a wealth of data available to the team. At the early stage the report’s concept has been discussed with the representatives of the Georgian Government at the PREGP conference in November, 2000 and during the mission to Georgia in December 2000. We are grateful to the Economic Advisor to the President of Georgia T. Basilia for the opportunity to discuss the scope of the report and its objectives. We also express our gratitude to the staff of the Ministry of Health, Labor and Social Welfare, especially to A. Zoidze for valuable comments. The Head of the Department of Coordination of Adjustment Programs in the President’s Administration G. Gongliashvili was one of the active proponents of the study. The report benefited from field trips organized by SDS to Imereti. The study was conducted in ECSPE and supervised by D. Gressani who provided leadership, advice and support to the report team. The support from the Country Team, J. O’Connor, the Country Director for Georgia, as well as from C. Martin and P. Nicholas was essential. T. Yaprak, the World Bank Country Manager, provided guidance and support at the conception stage of the report. Peer reviewers P. Lanjouw and A. Posarac provided comments. P. Bocock provided editorial guidance for the finalization of the report. We also gratefully acknowledge the support of the Georgian Social Investment Fund team both for their substantive inputs in discussing the recommendations of the report and in providing financial support for the health and education modules of the survey. M. Lokshin and M. Ravallion (DECRG) helped the team in discussions about the methodology for poverty monitoring.

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EXECUTIVE SUMMARY

1. The Poverty Assessment for Georgia (Poverty and Income Distribution Study, Report No 19348-GE, May 1999) analyzed the living standards of the population in a country recovering from a particularly severe collapse of GDP (by over two-thirds between 1992 and 1994) and hyperinflation. The economy started to grow in 1995, with growth rates of over 10 percent in 1996 and 1997. At the same time, inflation came down to moderate levels and the fiscal situation, while remaining fragile, was brought under control, allowing the Government to improve its financing of social expenditures. These trends underpinned an improvement in living standards. Indeed, at the time of the Poverty Assessment, the relatively high GDP growth rates reached in 1996 and 1997 had generated expectations that fairly rapid growth would continue and that poverty would eventually fall.

What Has Happened to Poverty?—Between 1997 and 2000 poverty has increased unambiguously, for a full set of poverty lines and definitions of poverty measures.

2. Any poverty number depends crucially on the methodology used to derive it. In this report we start by applying many poverty lines, which are used to measure poverty in Georgia on the basis of data from official household surveys. We also use many rounds of this survey to see trends. And we find that these different approaches and data tend to tell a similar story. As Table 1 shows, poverty has increased unambiguously and significantly in 1997-2000.

<table>
<thead>
<tr>
<th>Poverty definitions (lines)</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Official minimum</strong></td>
<td>47%</td>
<td>50%</td>
<td>53%</td>
<td>53%</td>
</tr>
<tr>
<td>US$4.30 per capita/day at PPP</td>
<td>50%</td>
<td>57%</td>
<td>60%</td>
<td>63%</td>
</tr>
<tr>
<td><strong>Recommended poverty line (baseline)</strong></td>
<td>14%</td>
<td>20%</td>
<td>23%</td>
<td>23%</td>
</tr>
<tr>
<td>US$2.15 per capita/day at PPP</td>
<td>16%</td>
<td>19%</td>
<td>23%</td>
<td>24%</td>
</tr>
<tr>
<td>US$1.075 per capita/day at PPP</td>
<td>3%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: SDS SGHH primary data and World Bank. Note: The poverty headcount is the percentage of the population with current consumption per equivalent adult below the cost of the minimum consumption basket. The official poverty line uses a normative poverty basket and CPI price data to cost it; and is around 100 GEL (about US$50 at current exchange rate) per equivalent adult per months. The recommended poverty line was developed jointly by the World Bank and SDS in 1998; it uses actual consumption patterns of the population and survey prices (its non-food component is fixed in real terms to 1996 and deflated using the CPI for non-food items); it is about 55 GEL (US$25) per month per equivalent adult. The equivalence scale used in the official and recommended methodology is the scale developed by SDS and used in Georgia to determine the social assistance payments. International poverty lines expressed in dollar terms (US$ in PPP) are per capita and use the latest (1996) revision by the World Bank, updated with the Georgian CPI. All figures are averages of quarterly data.

3. The increase in poverty was not monotonic. Most of the increase happened in 1998 and 1999 with a subsequent stabilization in 2000. It also affected different groups differently. We find that distributionally sensitive measures of poverty show an increasing differentiation among the poor, and signs that the poorest of the poor are
becoming poorer. This is illustrated by Table 2, where the sharpest increase is in poverty severity, the measure capturing the inequality among the poor.

Table 2. Poverty Incidence, Depth and Severity, 1997-2000 (baseline poverty line)

<table>
<thead>
<tr>
<th></th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>Increase %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty incidence</td>
<td>0.137</td>
<td>0.198</td>
<td>0.232</td>
<td>0.231</td>
<td>68</td>
</tr>
<tr>
<td>Poverty depth</td>
<td>0.041</td>
<td>0.066</td>
<td>0.074</td>
<td>0.075</td>
<td>84</td>
</tr>
<tr>
<td>Poverty severity</td>
<td>0.019</td>
<td>0.033</td>
<td>0.035</td>
<td>0.036</td>
<td>94</td>
</tr>
</tbody>
</table>

Source: SDS SGHH primary data and World Bank. definitions—see Table 1 notes. Note: Poverty indices are rounded to the third digit.

4. Two processes made poverty more “malignant”. One was rising vulnerability to poverty for the average household. This study argues that the increase in vulnerability, driven by the volatile economic environment and lack of smoothing at all levels of the economy, was a key factor affecting living standards of the population over the 1997-2000 period. As a result, and despite the fact that the extent of absolute poverty at any point in time remained around 20 percent, 40 percent of population have experienced poverty at least once during the year 1999-2000, and 60 percent of the population faces a real risk of experiencing poverty in the not so distant future (over a three year time horizon).

5. The study shows that movements in and out of poverty are not a simple churning of households around the poverty line, but tend to have long-term consequences, leading to increasing chronic (long term) poverty. Using the baseline poverty line and the data on households which were repeatedly interviewed in the survey we find that the share of the population who remained in poverty throughout the year has increased from only 1 percent in 1997 to 5 percent by 1999. We link this increase to responses by households to high levels of unpredictability and variability. Households deploy strategies (such as shifting to subsistence farming, or pulling children out of school) that help them to cope with high risk but seriously compromise the prospects of improvement over the long term. Georgia is experiencing just the onset of this process, but future prospects of poverty reduction will depend crucially on the ability to limit these tendencies.

➤ Why Has Poverty Increased?—Over the period consumption fell and inequality rose.

6. A number of macroeconomic developments led to a situation where despite steady GDP growth over the period, private consumption registered a decline in 1998 and 2000. At the same time, inequality increased, contributing strongly to the increase in poverty. The increase in inequality can be attributed in its turn to macroeconomic instability.

➤ Why Have Living Standards Not Risen Despite Growth in GDP?—Growth was too weak, too concentrated in a narrow set of sectors, and there were no effective mechanisms to redistribute its benefits.

7. According to data on the sectoral composition of value added recently released by the SDS, 75 percent of the increase in the real value added in the Georgian economy over the full 1997-2000 period has occurred in just three sectors: communications, financial
intermediation and transport, whose aggregate share in total employment is below 5 percent. More importantly, the potential of these sectors to generate additional employment is limited by high unit investment costs, and they tend to be geographically highly concentrated. The remaining 25 percent of growth came from sectors accounting for a quarter of total employment: industry, construction, trade, restaurants and tourism related services. About half of the population depends directly on land, and suffered from a negative growth rate of agricultural production.

Who Benefited and Who Lost?—The 1998-99 crisis hit those who were benefiting from the period of growth—the self-employed and private sector workers. But the worse impact of the crisis was on the most vulnerable, and particularly on children.

8. The increase in instability means that the poverty profile by groups of population has become "flatter", and the risks facing different groups have converged. Despite this convergence, the clear losers in the period were children. By the year 2000 children, especially from large families, were the group with the highest poverty risk. The position of rural areas, which are vulnerable to adverse weather conditions, has worsened considerably, and the former clear advantage of rural over urban residents almost disappeared.

9. The poorest are those who are made vulnerable by a number of compounding factors: exclusion from market opportunities, in particular trade and work abroad, which require mobility (hence good roads) and physical health, or have fallen through the formal and informal social safety nets because they do not fit social and official criteria for receiving assistance.

What Has Happened to the Poor?—The depth and severity of poverty have increased, and the most socially vulnerable have become poorer and more deprived.

10. The delivery of basic services to the population has worsened in some key respects. The poor were particularly hard hit in this process, having fewer alternative ways to compensate for the low quality of publicly provided services based on private resources. The rising share of children among the poor, combined with limited access to social services and the declining quality of education and health care, means that there is a real risk of perpetuating poverty into the next generation.

What Did the Government Do to Prevent the Worsening of Poverty?—The answer to this question is ambiguous. On the one hand, the Government created adequate foundations for a market economy, enabling private sector growth. On the other hand, the Government did very little to help the poor directly and in some key respects the situation was made worse by allowing the accumulation of arrears on pensions, salaries for teachers, and other social expenditures. The social protection system has very limited command over fiscal resources. Its impact is further reduced by very poor targeting and considerable leakage to the non-poor.
11. The Poverty Assessment advocated five key elements of an anti-poverty strategy for Georgia:

- Sustained GDP growth that translates into rising per capita consumption;
- Improved Government capacity to redistribute income through taxation and expenditure policies;
- Creation of incentives to formalize income-generating opportunities and foster the growth of private employment outside of agriculture;
- Protection of the existing, minimum level of poverty-focused transfers, with improved targeting, and gradual increase in the level of transfers to one percent of GDP; and
- Selected targeted regional interventions to address the deepest pockets of poverty.

12. The lack of progress in reducing poverty over the period of 1997-2000 documented in this report ultimately can be traced to a very limited progress achieved over the period on all of these fronts. There was very low consumption growth, income distribution worsened, the informal sector has not evolved into the formal economy, private employment outside agriculture has not grown sufficiently, poverty-focused benefits have not been paid regularly, and only limited regional programs were implemented.

13. While the Government generally embraced the recommendations of the Poverty Assessment as inputs to its strategy, it was not successful in implementing it. More specifically, the improvement in revenue mobilization was too slow, especially over the last two years; at the same time, quasi-fiscal subsidies (especially in the energy sector) continued to have perverse distributive effects. Faced with constant lack of funds, the Government failed to consistently finance the benefits targeted to the poor and allowed a substantial build up of arrears.

14. Structural reforms to create the institutional foundations for the market economy brought about some expansion of private sector employment. But there are important parts of the structural reform agenda which are still awaiting action. Unfinished reforms, coupled with pervasive corruption, led to much lower benefits for the population and particularly for the poor than could otherwise have been obtained.

15. The weak capacity to protect the most vulnerable has been offset, as in the past, by very strong informal support networks. But, it is important to understand that these networks are not universal and many poor fall through their cracks. Poor performance in creating public sustainable safety nets is particularly worrisome, as shocks tended to exhaust traditional coping strategies for dealing with continuing hardship.

- Why was the Government's Performance in Implementing Anti-poverty Measures Inadequate?—Macro shocks leading to volatile growth have severely limited the potential of growth to reduce poverty. But more importantly, revenues have
improved too slowly, prompting continuation of quasi-fiscal subsidies, and, hence, yielding no improvement in the redistributive capacity of the Government.

16. The effect of macro shocks on the quality of growth and on poverty clearly depends on the Government's capacity to manage responses. The analysis in this report brings out clearly a key weakness of the economy that has exacerbated its vulnerability to shocks: weak fiscal capacity. According to IMF estimates Georgia collects only half of its potential revenue from the existing tax system. In 1999 tax revenue amounted to only 14 percent of GDP, among the lowest in the region. Low fiscal capacity makes it infeasible to run any meaningful social safety net or to invest strategically to make the economy less exposed to shocks.

➢ **Are there Any Signs That the Situation is Changing?**—The Government of Georgia is developing a comprehensive and participatory plan for reducing poverty, which it is calling a "Poverty Reduction and Economic Growth Program" (PREGP).

17. The Government has been enthusiastic in developing the interim PREGP (I-PREGP), and has conducted the process in an open manner and given it wide publicity. By the end of 2001 draft of the full National Poverty Reduction and Economic Growth Program was developed. The strategy identifies economic growth as the main engine of poverty reduction, but also recognizes the need for a new focus and priority to reforms in social sectors.

➢ **What is the key challenge in developing the full PREGP?**—The Government strategy sets clear priorities, but do not translate yet into targets for poverty reduction and a financial plan for fighting poverty.

18. The very title of the program document reflects the central role the Government sees for growth in generating the employment and public revenues necessary for sustained poverty reduction. We hope that this study will be an input to the development of a poverty monitoring and evaluation system and a set of widely shared priorities for public finance allocation based on the analysis of the causes of poverty.

19. Our simulations show that over the longer term, sustained positive growth can substantially reduce poverty rates. However, these reductions will only materialize if the government ensures that those at the bottom of the income distribution share equally in the benefits of growth. Therefore in setting targets for poverty reduction and monitoring progress, one needs to look jointly at both poverty and inequality.

20. We argue that the existing official methodology for monitoring poverty offers an inconsistent standard which will not allow the Government to trace real changes in poverty over time. Poverty monitoring is unlikely to meet the demands arising from the PRSP process given two major problems: (i) sampling is based on the old Census (coverage of IDPs is therefore a problem); and (ii) the official methodology of poverty line measurement does not provide a consistent standard for comparisons over time. It is a common opinion in Georgia that the new Census (2002) will address the first issue, but an effort to overcome political barriers to solve the second problem has to be sustained.
Unless such improvements are made, the simulations show that changes in poverty over the short term will be hard to measure with adequate precision.

21. Over the short term, growth within the PRSP macroeconomic framework will have only a limited impact on poverty, and thus other policies are called for. The simulations show that transfers can potentially play the most important role in reducing poverty. However, the nature of poverty (with a predominance of transient poverty and lack of strong link between poverty risks and observable characteristics of households) calls into question the scope for targeting based on formal criteria. Self-targeting and community-based targeting are more useful ways to identify the poor.

➢ What Priorities Does Our Analysis Help to Identify?—Macroeconomic stability and private sector development, public sector governance and strengthening Government finances, protecting human capital and enhancing participation of the poor.

22. This report reaffirms the conclusion of the Poverty Assessment on the centrality of broad, pro-poor growth for poverty reduction, and the fact that this in turn depends on (i) macro stability and (ii) private sector development.

23. The expansion (compared to the Poverty Assessment) of the policy agenda to include vulnerability issues leads to a new emphasis on achieving macroeconomic stability as a pre-condition for reducing the exposure of the poor to risks. This requires macroeconomic policies focused on reducing volatility and uncertainty; protection of existing transfer programs; strategic investment in key bottlenecks of the economy and elimination of arrears in State obligations towards the population.

24. The analysis also shows that the government’s ability to redistribute through its tax and expenditure policies is key to achieve greater stability, and in turn requires improving public sector governance and strengthening government finances.

25. Stopping the trend towards the deterioration of human capital is essential to ensure that the benefits of the growth are widely shared. Education and health policies focused on increasing the human capital of the poor is the third priority, requiring a concentrated action to improve the quality of services.

26. Finally, participation of the poor in the decisions affecting their lives, including greater involvement in managing social assistance at the community level, is needed to help the poor to benefit from growth.
1. ECONOMIC GROWTH, GOVERNMENT POLICIES AND POVERTY: KEY DEVELOPMENTS OVER 1997-2000

1.1 The starting point of this report’s analysis of characteristics and causes of poverty in Georgia is the prediction in the 1999 Poverty Assessment for Georgia\(^1\) which stated that growth alone will not suffice to reduce poverty: "the quality and patterns of growth, and in particular, whether growth translates into widespread increases in productivity and labor incomes, or whether it results in increased incomes for only a few, will be the key determinants of the evolution of poverty during the next few years". To determine the validity of this diagnosis, we examine in this chapter the link between poverty and growth.

1.2 Year-to-year changes in welfare, poverty and inequality in Georgia result from the complex interaction of economic shocks, Government responses and various coping strategies that people deploy to respond to these shocks. How to analyze this complex web of interactions in a simple and consistent way? We base our study on the fact that poverty is a condition that strikes individual families. The primary source of information is therefore a dataset based on a comprehensive and representative survey of living conditions, employment, spending and incomes of Georgian families.\(^2\)

1.3 Following this approach we first look at the institutions and values prevailing in the Georgian society, which form the milieu in which individuals, market forces and the Government operate. We then look at the broad, nation-wide patterns of changes and trends in poverty and inequality as an outcome of economic shocks, institutions and responses to these shocks. Finally, we go beyond income poverty to include an assessment of risk, vulnerability, access to basic services, social exclusion and powerlessness.

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\(^2\) As stated in the Poverty Assessment, the analysis of poverty depends crucially on the accurate measurement of consumption levels of households. This information is collected by the sample survey carried out quarterly since 1996 by the Georgian State Department of Statistics (SDS) on a regionally representative sample of 0.2 percent of households in the country. The Poverty Assessment argued that quality of the data collected through this very detailed survey is high enough for an in-depth analysis of poverty and for monitoring its changes over time. Hence the database for this study is the same as that used in the Poverty Assessment: individual records from a Survey of Georgian Households (SGHH). We have now a longer period for which data is available (1996-2000, instead of 1996-1997), and a wider coverage of different aspects of well-being (special modules on access to health, education and subjective evaluation were added to the survey in 2000). In addition, we use data from a survey covering Internally Displaced Persons (IDPs) conducted in May 2000 by IFRCRC and SDS.
A. THE BACKGROUND FOR UNDERSTANDING POVERTY IN GEORGIA

1.4 Years of crisis and civil war caused the impoverishment of Georgia, which had formerly been a wealthy country, tended by educated and entrepreneurial people, with good climate and soils, and substantially spared from the direct consequences of the two World Wars. Georgia is among the transition economies that have suffered most during the past decade, and is now one of the six poorest countries in the region. Fiscal collapse in the early 1990s, associated with a catastrophic decline in GDP, made it impossible for the Government to finance its most basic functions, let alone an effective social safety net. It introduced a series of bold reforms, creating the foundations for a market economy; but weak implementation of these reforms did not allow society to reap their fruits. In this context, land, family networks, private support mechanisms and Georgians' traditional entrepreneurship have become the only reliable mechanisms to guarantee survival.

Sources of Livelihood of a Georgian Household

1.5 Figure 1.1 shows the sources of livelihood of a typical Georgian household. The data represent annual flows of income (or flows of resources, to be exact) received by a household, checked for consistency with other sources. We include in the annual income flows in-kind income and consumption—produce of a family farm, humanitarian aid or crop sharing.

![Figure 1.1: Sources of Income for a Georgian Household: 1997-2000](image)

Source: Primary SGHH data, households with complete annual data (four interviews)

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From SGHH dataset: only households with four completed quarterly interviews are used so as to clean the data from the effect of seasonality. The most controversial aspect of the data is a large discrepancy between the total cash resources that the household claimed to have used during the year, and its actual annual cash outflows. This is by no means an exceptional result in the household data (see Making Transition Work...). What is unusual is the magnitude of this gap, its persistence and its distribution. Using these properties and a series of assumptions (presented in detail in R. Yemtsov (1999)) we attribute most of this discrepancy to unreported incomes. Indeed in the data for 1997-2000 the gap is larger the more employed persons the household has, the more buoyant the local economy is (the gap is the largest in Tbilisi and Batumi) and the more educated the household members are—see regression results in the Annex to the World Bank (1999).
1.6 The picture that emerges is of substantial diversification of sources of income: a typical Georgian household receives income during the year from almost all the listed sources. Since none of these sources provides a steady stream of incomes over the year (even wages and pensions are paid with substantial delays), diversification appears to be a good strategy to stabilize somewhat the receipts flow.

1.7 As Figure 1.1 suggests, land plays a prominent role as a source of livelihood: throughout the period under review agriculture accounted for at least a third of household incomes, being the largest single source (“Farm cash income” and “In-kind income” in Figure 1.1). However, very little gross agricultural output is sold on the market, and production remains focused on local need. Income in kind is a source of income for as many as 90 percent of households in Georgia.

1.8 The next most important source of income is “cash income from an unreported source”. Depending on the reference year, this component accounts for between a quarter and a third of total household resources. By definition, this source is not easily understood, and may well contain several heterogeneous elements, which households are not willing to disclose during interviews—including income from informal work, remittances, private transfers, and income from businesses.

1.9 The role of wages has increased considerably compared to 1997, but they still account for less than a fifth of total household income. The share of households receiving wages has also increased somewhat over the period, from 50 percent to 55 percent. The importance of non-agricultural self-employment has shrunk, both as a share of total income and in terms of incidence: as many as 44 percent of Georgian families declared this source of income in 1997; the comparable figure for 1999 was only 22 percent.

1.10 Transfers from the State do not represent a substantial share of household revenue, but many households do receive something from the State (predominantly pensions): as many as 60 percent of households in the year 2000. Private transfers, on the other hand, are comparable as a total share of income to public transfers, but are less widespread: only a third of households are receiving such private aid.

1.11 We will analyze the role of main types of transfers in detail in Chapter 2, but anticipating the results, one feature of the safety net is remarkably persistent over time: bulk of these resources, both private and public, is distributed equally to the poor and the relatively well-off, leaving no imprint on the overall distribution of income among Georgian households. Nevertheless, some households do gain from this redistribution of nation’s resources through the State budget and private charity.

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4 Remittances are a source of income that are particularly difficult to register. Survey households declared around 20 mn. US$ a year as private remittances from family members residing abroad; by contrast, balance of payments data record official transactions of this kind at close to 200 mn. US$ (IMF 2000), and these amounts are thought to be only the tip of the iceberg: various expert estimates range from 600 mn. to 1.5 bln. US$ a year (EIU, 2001).

5 This seems to be at odds with the fact that only 20 percent of the population is eligible for transfers from the State; in fact it shows the importance of the extended family as the main living arrangement in Georgia. A simple illustration clarifies the point. Assume that all families have 4 members. Assume that one person is receiving pensions in each family. Then 100 percent of families will be transfer recipients, while only 25 percent of the population receives pensions.
1.12 The data suggest that the key factors which affects household welfare in Georgia are: land, entrepreneurship, informal networks and the extended family, and the State. We shall now briefly review each factor and its impact on people's welfare.

Land

1.13 Historical background. Georgia's peasants today work in the fields, herd livestock and tend to vineyards often in the same ways as in the distant past. Reliance on land is an intrinsic part of Georgian culture.\(^6\) Under the Soviet regime, the 200,000 hectares already in use as household plots were a thriving part of the economy and a source of considerable wealth to the rural population. The process of land reform began in 1992, when families, whatever their size, were to receive 1.25 hectares without the right to sell land. In March 1996 a new Law of Agricultural Land mandated actual transfer of full ownership rights to individual users. Of the 3 million hectares (ha.) of agricultural land in Georgia, 1.1 million ha. were subject to land reform. In addition 750,000 ha. were leased to producers under a land leasing program also introduced in 1996 (with leases up to 49 years, but with most set at around 10 years). This process of land redistribution and titling resulted in small farms averaging around 0.75 ha in size, ranging for most of the country between 3000 m\(^2\) to 2 ha.

1.14 Situation by the year 2000. Agriculture is a key sector in Georgia. It accounts for more than 25 percent of GDP,\(^7\) generates 60 percent of value added in productive (i.e., non-service) sectors, and provides employment for more than half of Georgia's population, not only in rural communities, but also in many small cities. But, yields are quite low, the domestic market is depressed and exports are small compared to those of other countries similar in size and circumstances. The sector is dependent on irrigation infrastructure in the east and drainage infrastructure in the west. This infrastructure system has virtually collapsed as a result of war, vandalism, theft, and years of deferred maintenance. The severe drought of 2000 (and to a lesser extent the 1998 drought) demonstrated the consequential fragility of farmers' coping ability in the face of shocks.

Entrepreneurship, Informality and Mobility

1.15 Historical background. Given its geographical location, Georgia has always played a key role in regional trade, with its capital and large regional centers as thriving regional markets. Much of what was achieved was due to ethnic diversity, attracting merchants and traders from different countries. Increasingly people became mobile, seeking opportunities outside their country. Perestroika in the mid 1980s saw an enormous influx of new ventures into production and trade.

1.16 This business culture, however, developed against the oppressive nature of the communist regime. Its principles were to minimize visibility to the Government, to ignore formal rules, and to operate on the basis of personal connections. This approach

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\(^6\) To express how deeply the environment has been transformed by people rooted in the land for thousands of years, Georgian philosopher Merab Mamardashvili once wrote "the Georgian landscape is an artifact of the Georgian soul".

\(^7\) Up to a third, if one includes home processing of agricultural produce in agricultural output.
became further entrenched as a result of the immediate post-independence years of civil war and the almost complete collapse of the State, when businesses had to struggle to survive harassment and confiscations.

1.17 Situation by the year 2000. Informality remains the prominent mode of doing business in Georgia. Lack of enforcement of existing regulations and weak fiscal discipline do not create a paradise for businesses, however. According to a business survey carried out by the EBRD and World Bank, Georgian enterprises pay the highest proportion of their revenue as bribes in the region. Discretionary tax enforcement, the absence of reliable property registers, corruption and onerous licensing requirements have discouraged investment, in particular in SMEs.

1.18 Many Georgians still resort to working abroad as the only way to earn a substantial income; according to TACIS, approximately 800,000 people have left Georgia. According to a study by N. Dudwick, the majority of migrants are able-bodied men, although sometimes families migrate together, selling their household possessions and apartments to raise money for the trip. Migrants often perform hard physical work and encounter considerable dangers in order to send home amounts of US$100 or more. Migration often brings workers into contact with the criminal world. If people are involved in buying and selling, they must cope with "rackets." The recent introduction of a visa regime by Russia has created additional difficulties and humiliations for migrants. It may also lead to loss of income and higher unemployment in Georgia.

Extended Family and Children's Welfare

1.19 Historical background. The 1999 Poverty Assessment described a deep shift that occurred in the 1990s from the modern nuclear family to traditional multigenerational family as the main living arrangement for the Georgian households. The category of single parents living alone has almost disappeared, and the number of pensioners living independently has fallen substantially as these vulnerable individuals have been incorporated into larger extended households. Cultural factors, in particular the high value placed on children's welfare in Georgian traditions, have played an important role in mitigating the impact of poverty on children. Indeed, the Poverty Assessment found that in 1996-97 children were among the demographic groups with a relatively low risk of poverty, and that they were protected by complex private safety net arrangements.

1.20 Situation by the year 2000. The extended family remains the leading form of Georgian households. The robustness of private arrangements protecting children has been strained by the economic crisis, but they remain strong enough to prevent severe deprivation. The recent study by WFP to monitor the impact of the drought in the most affected regions of Georgia found no evidence of acute under-nutrition, starvation, or of increased mortality or morbidity, for children under the age of five. There is an evidence, however, found in the survey, of low height-for-age, or stunting, in Georgia's poor children, an indicator of long-term malnutrition. Nutritional screening of children at the

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9 See in N. Dudwick an explanation of labor migration from Samegrelo—"Migrants act according to the principle—if they can't help their family, at least there won't be an extra mouth to feed."
end of 1999 found that 15 percent has a low height-for-age index, a sign of poor socio-economic conditions and inadequate access to food over a long period. The same survey also reported wide variations in regional prevalence of low weight-for-height and height-for-age. In upland villages the prevalence of low weight-for-height and anemia are even higher. This is a distressing new finding which has not yet received adequate public attention, in part because a considerable number of deprived children are “hidden” in remote and inaccessible areas.

The State and its Citizens

1.21 Historical background. An important part of the legacy from the Soviet period has been the deep mistrust of citizens in State institutions and public media. The communist regime weakened, if not wiped away the roots of civil society. Instead, strong informal networks defined by regional and personal loyalties emerged.

1.22 Situation by the year 2000. Despite an often hostile environment, and sometimes heavy political pressure from Russia, Georgia has made important progress in creating political stability. In addition, as already noted, the country has established the legal and regulatory framework for a market economy. The independent press is very open and dynamic and there are now numerous NGOs, though still relatively undeveloped and active primarily around specific issues (e.g., environment, children). Although some 85 percent of the population, as reflected in GORBI survey, does not participate in any organization, political or otherwise, these new institutions are increasingly challenging the traditional networks, based on flexible and discriminatory interpretations of rules and commitments. However, the absence of consistent contract enforcement and, more broadly, of a well-established rule of law poses a constraint to the development of a well-functioning market economy. It also undermines macroeconomic stabilization as inadequate tax collection is directly linked to the weakness of enforcement capacity.

1.23 Lack of trust in the authority of the State and its institutions is mirrored at all levels of civil society. In a recently completed public opinion survey, respondents were asked to report how much trust they placed in each entity. Very few (7 percent) reported trusting State offices, while about half reported that they “do not trust” the State. The respondents reported similar levels of trust in municipalities as they did in the State in general. Trust towards the Tax Administration was the lowest; 77 percent reported that they do not trust this institution.

1.24 This brief review of institutional arrangements underlying the most important economic factors of welfare shows that building on the almost universal access of the rural population to land, on the resilience of informal ties and on its entrepreneurial culture, the Georgian families have been able to adjust to adverse economic

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11 Very often these networks were based on political factors, including the strong and hidden intellectual current of independence and national integrity. Communist party, in its turn, established its own networks, largely around sharing the power, often intermingled with traditional family ties. However, the primacy of informal networks over formal rules was not created by the regime or has been brought about in a fight against the communist rule. In the Georgian culture personal loyalty links played a very strong role for centuries.
circumstances. As a result, overall levels of deprivation in Georgia have remained low compared to the magnitude of the economic collapse, as shown in 1999 Poverty Assessment by the World Bank.

B. SHOCKS AND POLICY RESPONSES

1.25 Being a small country located between and trading with large and unstable economies (Russia and Turkey), Georgia is exposed to large external shocks. A number of shocks did in fact greatly influence the welfare of people in Georgia in 1998-2000:

- Severe droughts in 1998, affecting regions relying on irrigation (Eastern Georgia). The impact of drought has been particularly pronounced in the second and the third quarters.

- Crisis resulting from an unsettled conflict in the break away region of Abkhazia, prompting the IDPs crisis (the Gali region exodus) in early 1998, affecting most severely the neighboring regions of Samegrelo and Imereti.

- The Russian economic crisis and devaluation of the ruble in August of 1998. By December, 1998 the National Bank of Georgia had to yield to severe pressures and devalued lari. The crisis severely affected trade between the two countries in 1998-1999 and flows of remittances from Georgian workers employed in Russia.

- The second drought in 2000 affected almost all of the country. The drought also created energy shortages by limiting hydroelectric power generation.

- The increase in the price of energy imports in 2000, political interference by Russian authorities in energy supplies to Georgia, and the subsequent full-blown energy crisis by the end of 2000.


- The worsening of the impact of the war in bordering Chechnya, leading to the marked inflow of refugees to Pankisi gorge in 2000.

1.26 Among these events, the Russian economic crisis undoubtedly had a major short term impact, and its lingering effects continue to be felt. The crisis weakened Georgia’s macroeconomic performance in both 1998 and 1999 (Table 1.1). The slowdown of the economy led to a fall in real wages and in employment; unemployment as measured by the LFS reached record levels in 1998. Despite these shocks, the economy has continued to grow over the period, albeit at a sharply slower pace from 1998 onwards. It was the quality of growth that has been affected, as demonstrated by persistently high unemployment rate.
Box 1.1. Consequences of the Civil War: Poverty Among the IDPs

The central Government's inability to exert effective control over substantial segments of its territory and borders has had a significant adverse impact on its efforts to mobilize revenues and fight corruption. Georgia has between 250,000 and 300,000 Internally Displaced Persons (IDPs) from the "frozen conflicts" in Abkhazia and Tskhinvali region, and a growing number of refugees from neighboring Chechnya. Many IDPs have found refuge in the most prosperous parts of the country, Samegrelo and Tbilisi. Just over half live in private accommodations, with relatives, friends or simply in whatever shelter offers itself. The remainder were lodged, and continue to live, in what are known as collective centers: former sanatoria, hotels, and hostels. While some IDPs have integrated and found employment, many remain inadequately housed in crowded facilities and dependent on relief from the Government and the international community.

A special survey conducted in May 2000 by the IRCRC was the first attempt to assess the poverty status of IDPs. It found no significant differences in terms of the level of consumption between the local population and the IDPs. This is at odds with the finding that IDPs have a substantial disadvantage with respect to ownership of productive assets (especially land) and employment opportunities. This disadvantage, as shown in the data, is partly compensated by a relatively better coverage with various assistance programs run by the State and NGOs. A more critical look at the data identifies that some factors affecting the difference in living standards between IDPs and the local population were not fully accounted for (such as in-kind consumption, which was not measured in the survey and which depends crucially on the access to land). Taking these factors into account gives a higher estimate of the poverty rate among the IDPs by almost a third. The report prepared by IFRCRC also shows that poverty among the IDPs is not the key factor influencing the national poverty rate; as IDPs make up only about 6 percent of the population.

Sources: Press reports, International Federation of Red Cross and Red Crescent Societies, the Georgian Red Cross Society, the State Department for Statistics of Georgia and staff estimates based on the raw IRCRC survey data.

1.27 Table 1.1 brings out clearly a key weakness of the Georgian economy to withstand shocks: weak fiscal capacity. According to IMF estimates Georgia collects only half of its potential revenue from the existing tax system. In 1999 tax revenue amounted to only 14 percent of GDP, among the lowest in the region. Low fiscal capacity diminishes chances to run an effective social safety net or to invest strategically to make the economy less exposed to shocks in the future.

<table>
<thead>
<tr>
<th>Table 1.1. Key Economic Indicators 1996-2000</th>
</tr>
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<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Real GDP (% change)</strong></td>
</tr>
<tr>
<td>+10.5</td>
</tr>
<tr>
<td>Value added in agriculture (%change) n.a.</td>
</tr>
<tr>
<td>Real private consumption, (% change) -5.5</td>
</tr>
<tr>
<td>GDP Deflator (% change) 9</td>
</tr>
<tr>
<td>CPI inflation (% change) ‡</td>
</tr>
<tr>
<td>Real exchange rate, % change$</td>
</tr>
<tr>
<td>Real interest rate, p.a. 4</td>
</tr>
<tr>
<td>Current account, % of GDP 7</td>
</tr>
<tr>
<td>Government revenue, (% of GDP) 6</td>
</tr>
<tr>
<td>o/w Tax revenue 10.8</td>
</tr>
<tr>
<td>Employment total (’000s)</td>
</tr>
<tr>
<td>O/w wage employees</td>
</tr>
<tr>
<td>Unemployment rates (%) a</td>
</tr>
<tr>
<td>Memo: Avg. wage(% of poverty line b)</td>
</tr>
<tr>
<td>Memo: Avg. pension(% of poverty line b)</td>
</tr>
</tbody>
</table>

Source: IMF, World Bank, except data on employment based on SDS LFS and HH survey reports. a/ According to ILO methodology; b/ Using the SWS-WB line, about 55 GEL per a single adult per month at the end of 1999; c/ period average; d/ Average commercial rates on 3-month deposits; e/ Includes official grants; f/ forecast; g/ against USD. + shows real appreciation, period average; j/ Deflated with GDP deflator.

8
1.28 The lack of capacity to manage shocks is more evident at a disaggregated level. The performance of agriculture, which employs half of Georgia's labor force, was much less impressive than GDP; during 1997-2000 agriculture in fact suffered a net loss in value added. Sometimes the vagaries of weather tend to overweight the underlying economic factors. For example, by the end of 1999 the economy had partially recovered from the effects of the Russian crisis, and the GDP growth rate returned in the first quarter of 2000 to 4.4 percent. But then the effects of the drought started working through the economy, depressing the growth rate to negative 0.2 percent in the third quarter of 2000; this drop reflected the impact of drought on agricultural production, which was down by 19 percent. The grain and tea harvests in 2000 amounted to only 40 percent of 1999 levels.

1.29 Despite the rebound of the industrial sector after the Russian crisis (industrial production was up by 7 percent in 2000), the country's industrial potential remains heavily underutilized. Approximately 20 percent of industrial enterprises which had been operating in 1998 were idle in 2000, mainly owing to the lack of investment and energy disruption.

1.30 The annual figures presented in Table 1.1 do not reveal the extreme variability of the Georgian economy, which is subject to large seasonal fluctuations. These seasonal fluctuations are further amplified by external shocks. Data on quarterly real consumption from the National Accounts over 1996-2000 show that real consumption has fluctuated on a quarterly basis in a rather wide range of ± 20 percent, without a clear sign of stabilization.\(^3\)

1.31 Weak capacity to manage or smooth the effects of shocks was coupled with policies which often tended to exacerbate, rather than to mitigate, the negative impact of these shocks. For example, to compensate for the weakness of tax collection and to maintain its commitment to a stable exchange rate, the government relied heavily on two policy instruments: sequestration of budget spending and tight monetary policy. Not only have these policies not worked consistently, their social effects have also often been negative. The sequestration of the budget in the middle of the fiscal year has led to the accumulation of arrears in pensions and public (including social) sector wages. By the end of 2000 Government total arrears on expenditures stood at GEL 300 mln, a third of total State budget spending, of which pension arrears alone amounted to GEL 100 mln. (IMF 2001). Monetary policies have had an extremely limited scope in a situation when the level of financial intermediation was very low, reflecting low confidence in national currency. In these circumstances stabilization attempts through monetary instruments have exacerbated the effect of external shocks and in fact lead to less stability over the long term. One example is the defense of the national currency in the face of the sharp devaluation of the Russian ruble in 1998, which led to a flood of cheaper Russian goods to Georgia, hurting many Georgian producers and leading to the Central Bank losing a substantial part of its reserves.

C. INCIDENCE, DEPTH AND SEVERITY OF POVERTY OVER 1997-2000

1.32 A number of measures are used to assess the extent of poverty. Annex I discusses their advantages and accuracy. Before taking one particular line as a benchmark, we report developments in poverty indicators using most existing poverty lines in Georgia (Figure 1.2).

### Figure 1.2

**Georgia: Absolute Poverty Using Various Poverty Lines, Quarterly 1996-2000**

- **Official minimum**
- **Recommended poverty line adjusted for inflation**
- **International poverty line: extreme poverty (USD1.075 per capita/day at PPP)**
- **International poverty line: USD2.15 per capita/day at PPP**
- **International poverty line: USD4.30 per capita/day at PPP**

**Source:** SDS SGHH primary data and World Bank. *Note:* Absolute poverty the a percentage of the population with current consumption per equivalent adult below the cost of the minimum consumption basket in current prices, weighted with survey sampling weights. The official poverty line (old methodology) used a normative poverty basket and is around 100 GEL (about US$50 at the current exchange rate) per equivalent adult per months. The recommended poverty line was developed jointly by a World Bank and SDS team in 1998 is about 55 GEL (US$25) per month per equivalent adult; in this report we update this poverty line taking the non-food component in 1996 as fixed in real terms. US Dollar (international) poverty lines are per capita and use the latest (1996) revision of PPP by the World Bank, updated with the CPI. The break in the series is due to changes in the data collection protocol in the 3rd quarter of 1997, affecting urban areas.

1.33 Two key characteristics of poverty dynamics stand out: the high variability of poverty over time, and the increasing trend in poverty since late 1997 on the basis of all lines used. Distributionally sensitive measures of poverty reported in Table 1.2, show that those who fall well below the poverty line suffered most from these developments.

### Table 1.2. Poverty incidence, depth and severity, 1997-2000

<table>
<thead>
<tr>
<th></th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>Increase %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty incidence</td>
<td>0.137</td>
<td>0.198</td>
<td>0.232</td>
<td>0.231</td>
<td>68</td>
</tr>
<tr>
<td>Poverty depth</td>
<td>0.041</td>
<td>0.066</td>
<td>0.074</td>
<td>0.075</td>
<td>84</td>
</tr>
<tr>
<td>Poverty severity</td>
<td>0.019</td>
<td>0.033</td>
<td>0.035</td>
<td>0.036</td>
<td>94</td>
</tr>
</tbody>
</table>

**Source:** SDS SGHH primary data, recommended poverty line, consumption per equivalent adult using the economies of scale adjustment; the index of poverty depth distinguishes among the poor according to how far below the line their consumption falls; it is the poverty shortfall averaged for the whole population (zero for non-poor); the severity of poverty index gives relatively greater weight to poverty shortfalls that are substantially below the line (e.g., it captures the degree of inequality among the poor). All figures are averages of quarterly data.
1.34 Poverty incidence is a statistical indicator based on a sample survey, and as any other statistical indicator is measured with a certain margin of error. For the basic poverty line (the "recommended poverty line") used in this report, the confidence interval (95 percent level) for any quarter is between ±1.5 and ±2 percentage points. This margin of error should be kept in mind when attempting to judge progress or set targets for poverty reduction. But even with this margin of error there is a significant increase in poverty observed during the period.

**D. VULNERABILITY TO POVERTY, TRANSIENT AND CHRONIC POVERTY**

1.35 Many people in Georgia, even if not currently living in poverty, recognize that they are vulnerable since exogenous events could easily push them into poverty—a bad harvest, a lost job, a delay in pension or wage payments, an illness. This aspect is not captured by the traditional measure of poverty status, which is based on comparing current consumption to the poverty line. Luckily, in Georgia an analyst is almost uniquely blessed in having not one dataset per each household covered in the survey, but four, spanning across the entire year. In this section we use a simple extension of the procedure for measuring poverty to include vulnerability to poverty or risk of falling into poverty.

1.36 We begin by looking at the movements in households over the entire year (we call this constructed dataset of four quarterly observations for each household a "panel"). At any point in time some households which are currently non-poor will fall into poverty; and some of the poor will rise out of poverty. This is illustrated in Table 1.3, which summarizes movements in and out of poverty for households with complete annual data between 1997 and 2000. This Table distinguishes between households who had consumption below the poverty line in all four quarters of the year ("permanently poor"), who had been in poverty at least once in these four quarters ("sometimes poor"), and those whose average annual consumption was below the annual poverty line ("poor on average"). We use the baseline (recommended) poverty line, which gives us, as we saw, about 20 percent poor as quarterly average by the year 2000.

1.37 The Table witnesses that majority of the poor are transient poor. As can be seen, the "sometimes poor" category is significant and much larger than both the "always poor" category and the "poor on average" group (i.e., those with annual consumption below the annual poverty line). Against the 20 percent poor at any given quarter in 1998-2000, we observe that almost 40 percent of people in Georgia have experienced poverty at least once during the year. This clearly suggests that a large number of households which are presently not poor face the risk of poverty. Note that the number of poor "on average" is smaller that the number of poor in any given quarter; this indicates that part of the observed poverty is due to volatility of households' consumption. If the

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14 For a bivariate variable, and allowing for clustering of the sample frame.


16 Unfortunately panel data are not fully representative for annual data because of attrition. For this reason we are not using panel dataset as the basis for our analysis of time trends or poverty profile.
consumption of households in Georgia could be stabilized over the year, poverty would be reduced by a full 5 percentage points.\footnote{Part of this variability is what statisticians call "noise" or measurement errors. In fact the observed movements "in and out of poverty" can be due entirely to consumption of a household being overstated in one period and underestimated in the next. Unfortunately, there is no simple way to separate real changes from measurement error, and all methods rely on strong and untestable assumptions (see Luttmer 2000).}

1.38 It may be suggested that predominance of transient poverty is a natural outcome of seasonality (even though we use consumption, the most stable indicator of welfare) and is a "natural" phenomenon inherent to predominantly rural economy. But in fact we observe a clear increase of transient poverty over time in all dynamic measures. We also observe a strong rise in the number of "permanently" poor (from 1 percent to 4 percent).

### Table 1.3 Annual Indicators of Poverty Incidence, 1997-2000

<table>
<thead>
<tr>
<th>(percent of population)</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor in any given quarter</td>
<td>14</td>
<td>20</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Poor on average during the year</td>
<td>8</td>
<td>14</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Permanently poor during the whole year</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Poor at least once during the year</td>
<td>30</td>
<td>38</td>
<td>39</td>
<td>39</td>
</tr>
</tbody>
</table>

*Source: SDS SGHH primary data, panel dataset: poverty is based on 1999 Poverty Assessment “recommended” poverty line and annual consumption per equivalent adult, accounting for economies of scale.*

1.39 While vulnerability to poverty is a complex concept, it can be simply expressed as the risk of falling below the poverty line sometime in the future. An easy and intuitive approach is to fix the threshold at 0.5; this means that "vulnerable" households are those facing a 50 percent or greater risk of becoming poor. Intuitively it is clear that vulnerability depends on the magnitude of shocks that a typical household is facing in the future, where it is currently located in terms of consumption compared to the poverty line, and the number of time periods being considered.\footnote{Since this is instrumental for our estimate of vulnerability poverty line, the exact formula to measure the probability that the household at the current level of expenditures $e$ facing a level of variability over time $\sigma$, will be at least one time poor (below poverty line $PL$) over the next $n$ periods is:}

$$R(n, PL, e, \sigma) = 1 - \left(1 - \int_{-\infty}^{(PL-e)} N(0,1) \right)^n,$$

where $N(0,1)$ is a density of a normal distribution.

1.40 In Georgia we find that household’s level of consumption on average deviates from a nation-wide seasonal trend up or down in a large interval (between 0.2 and 0.5)—a very substantial level of unpredictability for such a short time period.\footnote{This is a ratio of a standard deviation of first differences (growth rates) of real consumption to the average of the initial level of consumption (in logs). We use a correction of the standard deviation for the measurement error proposed by Luttmer (2000).} This variability has not been stable over time and does not have any clear seasonal pattern, starting to increase in 1998 and reaching a peak at the beginning of 2000.

1.41 This level of variability implies that an average household in Georgia faces a risk of poverty over the year (four quarters) of 27 percent. Looking three years ahead, the estimated probability of an average household to fall at least once into poverty is very
high at 63 percent. This simply implies that the percentage of the population classified as poor on the basis of the "recommended" poverty line (around 20 percent) is only a small fraction of those in Georgia who must worry about, and struggle to avoid, falling into poverty at some point in the relatively near future.

1.42 Using this information we can estimate the "vulnerability poverty line", i.e., the level of current consumption at which a household will be safely above the poverty line to be "invulnerable" to poverty for one whole year. This level of consumption is as high as 105 lari per month per equivalent adult (in constant 1996 prices) in 1998-2000. As many as 53 percent of the Georgian population in the year 2000 were therefore vulnerable to poverty for one year ahead. Note that the vulnerability threshold that is developed in this way is very close to the "official" poverty line based on a completely different methodology. This suggests that the officially published data on poverty can serve as proxies for measuring the number of people vulnerable to poverty.

1.43 A simple way to illustrate the concept of vulnerability to shocks is to simulate the poverty impact of an income loss in an average household. Figure 1.3 presents predicted poverty rate under assumption that all households suffer from a similar income shock: 5, 10 or 20 USD per month. To put this simulation in perspective, one can remind that a loss of 20 USD per household per month is equivalent to a nation wide annual loss of 300 mln. USD; such an amount is close to SDS estimate of drought 2000 effect on agricultural production. And, as with other time series, these data in turn suggest that there has been no progress in reducing vulnerability to poverty over the last three years.

**Figure 1.3**

Impact of a given income loss or gain on poverty

Source: SDS SGHH primary data, recommended poverty line with correction for inflation, average annual based on quarterly changes in real consumption per equivalent adult at current exchange rate.

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20 VPL, which solves \[1 - 0.5^{1/n} = 1 - \frac{(PL-VPL)/\sigma}{\int_{-\infty}^{(PL-VPL)/\sigma} N(0,1)}\].
E. WHY HAS ECONOMIC GROWTH NOT LOWERED POVERTY?

1.44 The 1999 Poverty Assessment identified the key risks that would prevent the reduction in poverty despite continued growth. One was a failure to generate enough new jobs to expand the opportunities for the poor, especially in the formal sector. An increase in inequality was another factor singled out as a potential barrier for growth to reduce poverty. The lack of capacity on the part of the Government to redistribute the gains from growth and to provide an adequate safety net was the third risk factor. We will demonstrate that these were exactly the reasons for the persistence of poverty and that these risks are as relevant today, as they were in 1997.

GDP Growth Was Insufficient to Translate Into Gains in Peoples' Welfare

1.45 Table 1.1 shows that, while GDP grew throughout the period, private consumption declined in 1998 and 2000. During the same period, incomes grew less than GDP. This slower growth reflects the effect of terms of trade shocks (i.e., the relative price of exports vis a vis imports) and the net effect of government operation. In addition to low aggregate income growth, there have been changes in relative prices that have affected welfare. The difference between the GDP deflator and CPI index captures these shifts; it is especially large for 1999 (ten percentage points), reflecting the fact that consumers experienced substantial changes in the relative prices they face, in light of the increased price of tradables that followed the real exchange rate depreciations of end-1998. The cumulative growth of personal consumption appears to be 1 percent between 1997 and 2000 when the GDP deflator is used, but becomes -2 percent when the CPI is applied.

1.46 Employment generation has fallen substantially behind GDP growth. Wage employment went through a restructuring with the impressive growth of the private sector and a fall in SOE employment, but the net impact of these factors so far has been close to nil. Overall employment, as Table 1.1 shows, has changed only marginally since 1997—and was actually slightly lower in 2000 than in 1997 and 1998.

Growth Was Very Uneven and Affected a Relatively Small Fraction of the Economy

1.47 The negligible impact of growth on household welfare is explained by the nature of growth that the economy generated. Growth was concentrated only in a narrow set of industries, and it did not translate into substantial employment generation. Over the whole of the 1997-2000 period, 75 percent of increase in real value added occurred in just three sectors: communications, financial intermediation and transport, whose aggregate share in total employment is below 5 percent. More importantly, the potential of these sectors to generate employment gains is limited by high unit investment costs, and they tend to be geographically highly concentrated. The remaining quarter of growth in real value added came from sectors accounting for a quarter of total employment: industry, construction, trade, restaurants and tourism related services. And about half of the population which depends on land suffered from a negative growth rate of agricultural production.
Inequality Increased, Redistribution Stalled

1.48 During this period, the gains from growth were not shared equally and inequality increased. The Gini index for quarterly household consumption per capita has increased from 0.36 in 1996-1997 to 0.39 in the year 2000. In the context of this welfare measure, which changes very slowly and by definition reflects all "mitigation" effects through redistribution by private and public safety nets, an increase of 8 percent is not trivial.

Both the Fall in Average Consumption and the Increase in Inequality Have Pushed Poverty Up

1.49 Poverty levels can increase for two reasons: either crisis lowers the consumption of all members of society, or the share of the poor in total consumption falls due to shifts in the distribution of total welfare. Often the two processes operate simultaneously.21

1.50 Table 1.4 below shows that poverty incidence in the panel data has increased over the period by 7 percentage points. If only mean consumption had changed between 1997 and 2000 and its distribution between the rich and the poor had not, the increase in poverty would have been smaller than the observed increase by one percentage point. If only changes in the distribution of consumption had affected poverty, we would have observed an increase in poverty of just 1.8 percentage points.22 The Table also shows that bulk of the poverty increase occurred in 1998, when the effect of the growth (crisis) component dominates. But the increase in poverty in 1999 was clearly dominated by the worsening distribution. On the other hand the slight improvement in 2000 was due entirely to an improvement in the distribution.

| Table 1.4. Growth, Redistribution and Poverty Over 1997-2000 (Panel data) |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Percent Poor    | 7.73%           | 14.12%          | 15.02%          | 15.02%          | +7.29%          |
| Growth component| +5.45%          | +0.37%          | +0.01%          | +6.28%          |
| Redistribution component | +1.43%          | +0.52%          | -0.19%          | +1.81%          |
| Interaction term| -0.49%          | +0.19%          | -0.01%          | -0.80%          |
| Source: SDS SGHH primary data, panel dataset; poverty is based on World Bank poverty line and annual consumption per equivalent adult, accounting for economies of scale. |

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21 Every poverty measure may be decomposed in a simple way to quantify the relative importance of growth and changes in the distribution, as shown in Datt and Ravallion (1992) Growth and Redistribution Components of Changes in Poverty Measures: A Decomposition with Applications to Brazil and India in the 1980s//Journal of Development Economics, vol. 38, pp 275-295.

22 Formally, we calibrate the distribution of well-being relative to the poverty line. Poverty (P) is then a function of mean consumption and Lorenz curve, or P(z/μ,L), where z is poverty line, μ is mean consumption and L is Lorenz curve, showing the distribution of consumption between individuals. Then the change in poverty for Georgia between, say 1997 and 2000 can be expressed as:

\[ P_{2000}-P_{1997} = g + d + r \]

where the contributions of growth (g) and redistribution (d) are defined with:

\[ g = P(z/μ_{2000},L_{1997}) - P(z/μ_{1997},L_{1997}) \]
\[ d = P(z/μ_{1997},L_{2000}) - P(z/μ_{1997},L_{1997}) \]

and r is a residual due to interaction between growth and distribution.
This simple simulation shows both the dominance of growth as a key factor in poverty changes, and the importance of distribution, especially in the periods of low growth, when it becomes a major explanatory factor of poverty dynamics.

**BOX 1.2 Economic Reform, Poor Governance and Poverty**

Georgia's energy sector shows why poor governance is bad for the poor. Its story shows that weak institutions, lack of accountability and failure to enforce the law systematically undermine good governance. A corrupt bureaucracy slows down economic reform, leading to economic stagnation, poverty and a growing public mistrust in what is perceived as democratic form of government.

Like most CIS countries, after independence Georgia has used its electricity sector for softening industrial budget constraints. The resulting quasi-fiscal deficit of around 6 percent of GDP up to 1999 has been substantially larger than the narrow fiscal deficit. This situation and caused over US$1 billion of debt accumulation. The impact on the population was perverse, as many poor were forced to pay, and well connected non-poor neglected this obligation. As losses of energy sector accumulated, Georgian population became used to protracted electricity blackouts. Unmanageable situation led to apparently strong commitment to change things for the better.

During 1998/1999, all electricity distribution and generation assets (except those in territories not under Government’s control) were offered to strategic investors. A transparent and competitive privatization process followed, with the assistance of an international investment bank. In 2000, electricity transmission, dispatch, and wholesale market administration were offered for a 5-year private management contracts to qualified international companies. About 50 percent of distribution (mostly in Tbilisi, where AES-Telasi is a leading private distributor) has been privatized to date, and this affected powerful entrenched interests. In Tbilisi, collections have improved from 10-20 percent of billings to over 80 percent in those areas where new, more tamper-proof meters, have been installed (over two-thirds of customers to date). However, winter supply in Tbilisi has not yet improved substantially. Situation in Tbilisi, with most residents and businesses during the winter were receiving at most five or six hours of electricity a day (and often four hours, or less), is deeply frustrating the population.

This appears to be due to a combination of factors: political dispatch of power to non-privatized (and hence non-paying) regions outside Tbilisi, strong resistance to energy reform by vested interests, continued electricity theft by sector managers (particularly of transmission and dispatch), drought reducing hydropower availability. About 15 percent of electricity that AES has paid for and is contracted to receive is “disappearing”—a minute percentage of this can be accounted for through legitimate transmission losses. Worse, state owned entities are receiving free power on “official” grounds. By February, 2001 Azoti chemical plant in Rustavi has not paid even one tetri for the power it has received for the whole year 2000. The Lari amount that Azoti owes for power is equal to one month’s 24-hour winter supply for Tbilisi (a 100 percent payer). Although many of the former Sakenergo officials are accused of inappropriate behavior and abuse of power, there is no change. Power is still diverted to non-paying entities. Electricity continues to be diverted from paying customers in Tbilisi, to non-paying customers in the provinces and to the energy mafia, and the electricity supply keep on getting worse everywhere in Georgia.

The lesson is clear: privatization is succeeding in increasing collections; Government is so far failing to crack down enough on corruption in the sector, and on political allocation of electricity. If the Government does not crack down harder then privatization will be blamed, and will not extend beyond Tbilisi. The vested interests will be happy, and the population will be cold—for years to come.

By January 2001, most Tbilisi apartments had electricity for just four hours a day whilst many were completely without central heating. Families were resorting to kerosene-fuelled stoves in a bid to combat sub-zero temperatures, forced to spend their meager incomes on kerosene and firewood. Pensioner Izolda Nikoleishvili who shares a two-room flat with seven members of her family, buys between 80 and 90 liters of kerosene a month—at a cost of 70-80 lari (US$35-US$40)—spending a good third of all family’s income just on that. And Tamar Tkemaladze, 75, who hasn’t received her 12-lari pension for the past five months, claims, "It's very much in the interests of the kerosene mafia to keep this crisis going and force us to huddle around our primitive heaters."

Aside from the cost and inconvenience of these alternatives, they carry health risks. Adults and especially children complain that the kerosene fumes cause headaches, coughs, and allergies. There have been numerous reports of casualties from exploding kerosene heaters and gas canisters, and burns and injuries when people—especially children, increasingly responsible for household tasks—use them improperly.

Source: press reports
Inequality Increased Mainly as a Result of Macroeconomic Instability

1.52 The channels through which macroeconomic factors affect income distribution are intricate. Inflation, unemployment and fluctuations in aggregate income all affect the distribution of income. The overall impact of macroeconomic factors on the distribution is not always clear, and is likely to be specific to the institutions and history of each economy (Easterly and Fisher, 1999). The analysis reported above of the inequality dynamics suggests that in Georgia there is a link between macroeconomic indicators and inequality: income distribution worsens in "bad" periods—periods of aggregate GDP decline and macroeconomic instability—and improves in "good" ones. During 1996 and the first part of 1997, SGGH reported redistribution in the favor of the poor after the end of this growth episode and prior to the Russian crisis, growth in consumption was modest, but its positive impact was enhanced by falling inequality.

Poor Took the Brunt of the Shocks

1.53 Inequality rose very sharply once the economic crisis struck at the beginning of 1999, exacerbating the impact of the fall in consumption. Similar developments but on a lesser scale happened during the drought-induced crisis of 2000.

1.54 Therefore, periods of crisis appear to hurt the poor and worsen income distribution. During periods of relative stability, the poor tend to gain vis a vis the rich. The tendency of the distribution to worsen during crises means that for a given level of contraction in the economy's output, there is an excessive increase in poverty. Thus at the end of each crisis episode, Georgia has higher inequality and worse prospects for poverty reduction in future.

1.55 Moreover, although short-run fluctuations in peoples' welfare may well seem to yield a steady progression (upwards or downwards) over time, they may have long-term consequences with respect to non-income dimensions of welfare. Households may respond to high levels of unpredictability and variability with strategies that may cope effectively with high risk, but significantly reduce prospects for welfare improvement over the long term. We describe some of these trends in the next section.

F. Non-Income Dimensions of Poverty

1.56 Poverty can be characterized as the "condition of life so characterized by malnutrition, illiteracy and disease as to be beneath any reasonable definition of

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23 The most direct impact of inflation on welfare is through taxation of cash balances. The rich are better able to avoid this tax, since typically they have better access to financial instruments that hedge against inflation, while the poor are likely to have a larger share of their portfolios in cash. Second, inflation may have an impact on disposable income flows. If wages and transfer payments are fixed in nominal terms and cannot be readjusted immediately, real incomes will clearly be affected (in the short-run) by unanticipated inflation. If the poor are the main recipients of these incomes, inflation will increase inequality, and disinflation will reduce it.

24 See the Poverty Assessment for details.

25 Each percent of growth "buys" less poverty reduction than in the past.
Income matters, but so too do other aspects of well-being and the quality of life—health, security, self-respect, justice, access to goods and services, family, and social life. The consensus in favor of this broadening of the concept of poverty is well captured by commitment of the international community to the International Development Goals, which focus on reaching by the year 2015 not only reduction in extreme income poverty, but also achievement of universal primary education, elimination of gender disparity in education, reduction of infant and child mortality, reduction of maternal mortality, achievement of universal access to reproductive health services, and environmental sustainability.

Education

1.57 Georgia was an important cultural and intellectual center of the Soviet Union, and its universities hosted many students from other Soviet republics and from overseas. National pride in cultural and educational achievement is strong; the high value placed on education by the population has sustained relatively high rates of participation in education, despite the extreme hardship of the years following independence. The positive legacy of the Soviet system is a highly educated population—basic illiteracy is negligible and more than 20 percent of the adult population have higher education. But Georgia has also inherited some structural problems compounded (and overshadowed) by drastic under-funding of the system since independence. As GDP collapsed by more than 75 percent between 1990 and 1994, the share of public education expenditure in GDP fell from 7 percent to less than 1 percent in 1994, and remains below 2 percent, while the average is 5.1 percent for countries with similar levels of education participation.

1.58 Owing to shortage of funds, physical infrastructure has deteriorated severely. Many schools have been obliged to close during harsh winter weather. Virtually no replacement of furniture and equipment has been possible in this period. Despite recent improvements, teachers' salaries are still below subsistence level and arrears in payment have been common. Under-funding has had a severe impact on teachers, on the condition of school buildings, furniture and equipment, and on the availability of teaching and learning materials.

1.59 The quality of education is widely perceived to have declined, and attendance rates have fallen. Under-funding has also had an impact on equity. Management and funding of pre-schools and general schools has been largely decentralized to the district level, with the result that expenditure per pupil varies greatly between districts. Schools depend heavily on formal and informal contributions of parents who are required to pay for textbooks and school lunches, and are asked to make contributions for fuel, building repairs, and other needs. Some schools also raise funds through renting space in buildings, and charging fees for extra-curricular classes and services. But the ability of individual schools to raise contributions from parents and other sources depends on the resources of the local community.

1.60 Private expenditures on education were singled out by the Poverty Assessment as the most unequally distributed expenditure item. This difference has only become sharper over time, as total spending on education were increasing rapidly in real terms. Now the richest 20 percent of households spend an average of 22 times more on educating children than the poorest 20 percent. Access to quality education is now confined substantially to those who can afford private fees, or private tuition.

Health and Nutrition

1.61 For most Georgians, the possibility of illness or injury looms as one of the most frightening aspects of poverty. Most poor people feel that the health of family members has worsened significantly—reflecting poor nutrition; cold, damp housing; stress; inattention to minor ailments—few can afford today's high prices for treatment and medicine. In addition, once stuck by an illness, people face deteriorating standards of the health care. In the consultations conducted for the CAS, deteriorating standards of health care were frequently mentioned by the participants from various layers of the Georgian society as a major element of the decline in social conditions in Georgia.

1.62 For many inability to look after their appearance—for example being unable to visit dentists for years—lead to psychological distress and a loss of self-esteem. In SDS survey 95 percent of the poor who reported that they are in need of dental treatment did not visited dentist for more than one year; almost all of them mention lack of money as the only reason to do so. Another indicator of low quality of life is low public awareness about health. The evidence suggests the prevalence of relatively poor nutrition practices, such as diets high in fat, and negligence towards risk factors, such as a high incidence of smoking. As many as half of Georgian households report spending money on tobacco. Extremely poor households that fail to come anywhere near the nutritional minimum reported allocating an average of 9 lari a month for tobacco, which is more than they are spending on electricity and heating or on health care, or education of their children.

1.63 The trade-off between health care and other spending for Georgian families remains very acute. Total spending on health over the period has increased almost twofold, exceeded only by the rise in expenditure on education. The gap between the top and bottom quintiles in total spending on health care has widened from an already high factor of 5 in 1996-7 to a factor of 10 in the year 2000. As private payments have long become a condition of receiving any type of treatment, this tenfold differences implies sharp differences in ability to access the health care. Without effective health insurance, the illness of a family member is becoming one of the most serious risk factors for slipping into poverty. The study based on health expenditures information from the household survey found that as out-of-pocket expenditures have become the major source of health financing, access to basic health services for the poor has been adversely affected, and increasingly large numbers of health conditions are going untreated. The data shows that very few episodes of non-chronic illnesses or chronic illness are sufficient to completely impoverish those who already have low incomes.

28 For families with children of school age.
SDS survey conducted in 2000 with the health survey conducted by ECHO in 1996, one finds no improvement in the availability of health care services between these years.

1.64 In 2000 the SDS started to monitor changes in food consumption and its nutritional values. The SDS survey found that, for the poorest 20 percent of households, average food consumption per equivalent adult during the year was less than 1700 Kcal per day (as compared to the recommended minimum of 2000 calories). These households are particularly likely to be located in urban areas. However this level does not represent yet dire caloric deficiency and does not necessarily lead to malnutrition for adults. But it does present the potential for poor nutrition among some vulnerable groups, such as the elderly and children. WFP survey has revealed that some of these adverse consequences are already observed (UNICEF and WFP 2000).

Social Exclusion

1.65 In Georgia (and other Caucasian societies), lavish rituals of display, hospitality and generosity have traditionally been critically important mechanisms by which families maintain both self-respect and social standing in the community. Thus, most respondents feel deeply humiliated by their inability to dress themselves and their children properly, take care of their homes, buy gifts on appropriate social occasions, and accept or offer hospitality. In the CAS consultations, many focus groups also referred to the cultural deprivation they felt, with most people being no longer able to afford newspapers or books, and with many of their children no longer receiving a good education.

Gender, Powerlessness, and Vulnerability

1.66 Gender inequality in Georgia does not appear to be as serious a problem as in many other countries. Education outcomes are comparable by gender, with women having slightly lower secondary completion levels than men, but higher enrollment in tertiary education. The legal framework for women's rights is for the most part sound, and women enjoy the same access to property, and protection of property rights as men. However, as we are going to see in the next chapters, there are strong signs that women do not receive equal pay for the equal job or face barriers in accessing some parts of the labor market.

1.67 Although the Government has adopted a legal framework supportive of democratic principles, people associate their poverty with lack of freedom—they feel enslaved by their crushing daily burdens; by depression; from fear of what the future will bring. Some people feel their lives will continue to get worse; others express the hope that their "government will turn its face back to its citizens and help them get out of their burdensome and humiliating situation."

1.68 Finally, there is widespread economic insecurity among the population. Few of the respondents in the survey covering both local population and IDPs felt they could withstand a personal crisis, such as illness or loss of employment: as many as 56 percent reported feeling "very insecure".

2. DYNAMICS OF THE POVERTY PROFILE

2.1 By examining the poverty risk of different groups of the population, one can gain insights into which factors are associated with poverty and which population groups are most at risk. We start this chapter with a brief update of the poverty profile relative to key findings of the Poverty Assessment. Then we try to trace these changes to recent economic developments, focusing primarily on labor market trends. We also apply a multivariate analysis to identify the relative importance of each of the correlates of poverty and their changes over time. Finally, we look at specific Government policies over the period and their impact on poverty. To make the analysis comparable over time, we use the same baseline poverty line as the one defined in the Poverty Assessment (the “recommended” poverty line).

A. Gainers and Losers Over the Period 1996-2000

2.2 Do the poor today differ from 1996-97? Table 2.1\(^{31}\) shows that by and large in 2000, as in 1996, and in 1998, the strongest determinants of poverty risk in Georgia remain clearly economic: education, employment status, sector of employment, ownership of productive assets. This is also true for the composition of the poor by the subgroups, in other words, the fraction of the poor that belongs to each subgroup.


<table>
<thead>
<tr>
<th>Household and personal characteristics</th>
<th>Group poverty relative to average (national poverty incidence = 1.00)</th>
<th>Poverty decomposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Household head employment and ownership of land</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inactive or unemployed</td>
<td>2.6</td>
<td>2.1</td>
</tr>
<tr>
<td>Self-employed in agriculture</td>
<td>1.3</td>
<td>1.1</td>
</tr>
<tr>
<td>Employed in budget sphere</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Employed in SOE</td>
<td>0.5</td>
<td>0.9</td>
</tr>
<tr>
<td>Employed in private firm</td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>Self-employed outside agriculture</td>
<td>0.6</td>
<td>0.8</td>
</tr>
<tr>
<td>Household has cattle</td>
<td>0.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Household uses &gt;=1 ha of land</td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>2. Education (for persons over 15 years old)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>1.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Secondary Incomplete</td>
<td>1.1</td>
<td>1.3</td>
</tr>
<tr>
<td>Secondary</td>
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<td>1.1</td>
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<tr>
<td>Vocational Secondary</td>
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<td>1.1</td>
</tr>
<tr>
<td>Incomplete Higher</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td>University</td>
<td>0.8</td>
<td>0.7</td>
</tr>
<tr>
<td>3. Age and health status</td>
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<td></td>
</tr>
<tr>
<td>Under 7 y.o.</td>
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<td>1.0</td>
</tr>
<tr>
<td>Between 7 and 15 y.o.</td>
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<td>1.0</td>
</tr>
<tr>
<td>Between 16 and 25 y.o.</td>
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<td>1.0</td>
</tr>
<tr>
<td>Between 26 and 59 y.o.</td>
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<td>0.9</td>
</tr>
<tr>
<td>Over 59 y.o.</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Disabled</td>
<td>1.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td>1.0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Source: SGHH data. Note: baseline poverty, as defined in the Poverty Assessment; one interview per household. The table shows the poverty risk by subgroups, where the poverty risk is the poverty rate of that subgroup divided by the overall poverty rate.

\(^{31}\) The table shows the poverty risk by subgroups, where the poverty risk is the poverty rate of that subgroup divided by the overall poverty rate. Hence, a subgroup with a poverty risk of 1.5 is 50 percent more likely to be poorer than average, while a poverty risk of 0.5 indicates that someone is 50 percent less likely to be poorer than average.
2.3 At the same time, Table 2.1 shows some important changes in the relative importance of factors associated with poverty. In the "age/health status" category, children aged 7-15 have become increasingly vulnerable to poverty, both in terms of their percentage weight and in terms of poverty risk; they represent an increasing share among the poor, and their risk of poverty tend to increase over time. While poverty risk continues to be only weakly associated with the level of education, the difference in poverty risk between those with primary and higher education have widened.

2.4 Other correlates of poverty explored in the Poverty Assessment and not shown in Table 2.1 have remained significant. For example, female headed households continue to face an elevated poverty risk (around 20 percent above the risk of male headed households), especially the elderly; during the crisis this gap increased to 40 percent on average. As family networks play a crucial role as a coping strategy by the poor, those who are isolated or excluded from these networks (single pensioners, orphans) tend, as before, to be extremely poor. However, a majority of the poor are increasingly the working poor, often employed in the informal sector with insecure, temporary and low productivity jobs.

Urban versus Rural

2.5 The Poverty Assessment documented the relatively lower poverty risk in rural areas compared to urban, but identified signs that this risk ranking could reverse in future. By 2000, however, regardless of which poverty line one chooses, still a higher proportion of the urban population lives in poverty (see Figure 2.1a). Urban poverty was also deeper and more severe for most of the period. Chapter 1 described the land reform undertaken in Georgia, which created fairly egalitarian land ownership. However, there are (relatively small) groups which have become excluded from owning land (such as IDPs who face legal restrictions with respect to land ownership, or those who had not previously been members of collective farms, or those who are too old to tend to their land and do not have relatives to take care of it). In rural areas the landless constitute a small group (which does not exceed 5 percent of the population), but their poverty risk is three times higher than for the average rural population.

2.6 As Figure 2.1b shows, the severity of poverty had become more intense in rural areas than in urban by the year 2000. This reversal amply demonstrates the profound effect of drought on rural well-being. Both Figures 2.1a and 2.1b suggest an overall rising trend in both the incidence and severity of rural poverty, starting in 1998 and continuing in 1999, despite a good agricultural year. Therefore rural poverty does not simply reflect weather conditions: the causes of the deterioration of living standards in rural areas are much deeper. In particular, there has been a clear reduction in all forms of off-farm employment in rural areas, from an already rather low base. The Poverty Assessment demonstrated that non-agricultural activities in rural areas were key for achieving sustainable improvements in the standards of living of the rural population. The lack of any progress, and in fact reversal, on this front reflects the influence of many factors, of which persistent electricity shortages and black outs disproportionately affecting rural areas are among the most important.
2.7 The urban poor still make for more than half of the poor in Georgia. There have been considerable shifts in the respective shares of Tbilisi and cities outside the capital. The 1998 crisis (third quarter) directly and severely affected Tbilisi, but its effects were linger longer outside the capital.

**Children versus Elderly**

2.8 The Poverty Assessment found that in 1997 children, particularly young children, did not appear to be at especially high risk. By contrast, the elderly were found to be poorer than average, although this disadvantage was relatively small. A key factor in poverty appeared to be the dependency ratio—i.e., how many persons have to live on each breadwinner’s income.

2.9 While the role of dependency remains central, by the year 2000 the demographics of poverty have changed in some important aspects. There is a rapid increase in the risk of poverty among families with three or more children (Figure 2.2), and a slight decline in poverty risk for families with no children, creating a widening gap between these groups. It is important to note that the increase in measured poverty risk for families with three or more children is very robust to measurement assumptions (see Annex 1). The *increase* in poverty among families with many children is particularly pronounced among those with a single earner. This increased can be partly traced to the fall in real incomes, and partly—to a gradual erosion of the traditional transfers arrangements protecting children.

*Source:* SDS SGHH primary data and World Bank. *Note:* Absolute poverty is the percentage of the population with current consumption per equivalent adult below the “recommended” poverty line (which uses the same poverty basket as the revised official methodology, but taxes the non-food component in 1996 as fixed in real terms). The break in the series for urban areas reflects changes in the data collection protocol in the third quarter of 1997, affecting these areas (discontinuation of the application of the section on food processing in the household to landless households); severity of poverty gives relatively greater weight to poverty shortfalls that are substantially below the line (e.g., it captures the degree of inequality among the poor)
2.10 Figure 2.3 illustrates the general observation that where a particular risk factor only affects a small share of the population, a group with a high poverty risk need not necessarily account for a large fraction of the poor. Families with many (three and more) children, despite the increasing poverty risk, account for less than a fifth of all the poor.

2.11 Shifts in the relative risks of poverty by family composition affect differences in individual risks by age groups. Figure 2.4 shows that while pre-school age children were the main losers over the period as a whole, the school age children now top the list of age groups in terms of poverty.

2.12 The figure also shows the effects of the economic crisis of 1998-99: as the average risk of poverty increased, inter-group differences blurred. As the main channels of impact of the crisis were individual employment and earnings, these factors affected
households with the same demographic profile very differently and at different times, increasing intra-group variation, but “flattening” the poverty profile by groups.

Figure 2.4
Changes in poverty by age

Source: SDS SGHH primary data and World Bank. Note: Absolute poverty is the percentage of the population with current consumption per equivalent adult below the “recommended” poverty line.

2.13 The living arrangements of Georgian households remained roughly unchanged over this relatively short period, and the structure of poverty by household demographic characteristics has remained heavily dominated by extended families. There is an increase of the share of families with children among the poor (from under 60 to close to 70 percent of the poor). The share of single pensioners, the group with high and increasing poverty risk, remains roughly constant (at around 10 percent), while their share in the population has fallen (more pensioners moved in to live with the relatives).

Employed versus Inactive and Unemployed

2.14 Despite the observed link between demographic characteristics and poverty, the main determinant of poverty risk in Georgia remains economic status, i.e., factors such as employment, earnings, and ownership of productive assets (primarily land). The employed have retained their advantage over the non-employed, as Figure 2.5 demonstrates. This advantage narrowed somewhat in the pre-crisis period and in the recent (2000) recovery, but the 1998-99 crisis widened the gap. It is also interesting how stable trends are despite the overall volatility and quarter-to-quarter changes in poverty.

2.15 There was a big shift in the population between sectors of employment, and a smaller shift between employment, unemployment and inactivity over the period (with the exception of a relatively short period during the crisis when the number of unemployed increased by 25 percent, and an additional 5 percent of employees became inactive). The original distribution by labor market states was restored by mid-2000. We will come back to the factors influencing the trends in employment and returns to employment in section 2.3.
Figure 2.5
Changes in poverty by employment

Source: SDS SGHH primary data and World Bank. Note: Absolute poverty is the percentage of the population with current consumption per equivalent adult below the "recommended" poverty line.

Workless Households versus the Working Poor

2.16 At the time the Poverty Assessment was completed, households with an inactive or unemployed head faced the greatest risk of being poor (twice the population average) and, moreover, constituted a sizeable share of all the poor. Developments since 1997 have blurred this sharp contrast. In Figure 2.6 the upper line shows the fall in the relative poverty risk of families without an active earner.

Figure 2.6
Georgia: trends in poverty risks by occupation of main earner in the household

Source: SDS SGHH primary data and World Bank. Note: Absolute poverty is the percentage of the population with current consumption per equivalent adult below the "recommended" poverty line.
2.17 At the same time, the number of families without an active earner was also on a downward trend: from around 10 percent of the population to 8 percent. As a result the share of workless households among the poor had fallen from close to quarter to less than a fifth by the end of 2000. The poor in Georgia are increasingly the working poor.

![Figure 2.7](image)

**Figure 2.7**

*Composition of the poor population by the employment sector of main earner in household*

Source: SDS SGHH primary data and World Bank. Note: Absolute poverty is the percentage of the population with current consumption per equivalent adult below the "recommended" poverty line.

2.18 Another feature of this period was a very strong convergence of poverty risk by category of employment (Table 2.1). This outcome is not surprising, given the complexity and diversity of shocks over the period; everyone's consumption has become more volatile, and the employed became more vulnerable; the share in total poverty increased among households headed by private sector and Government employees. The only group among the employed which gained were households headed by farmers, who caught up with other working families. But as their number has expanded, the share of farmers among the poor remained practically unchanged.

2.19 A number of groups are classified as "vulnerable" according to Government criteria, and have been granted special privileges or entitlements. Among these groups, the disabled (especially the seriously disabled, groups I and II) have a higher risk of poverty than an average person (by about 20 percent). Special pensioner categories (veterans, defense employees, and others entitled to special pension supplements) have a lower risk of poverty than non-special pensioners, and their advantage has increased over time. Members of other special categories covered by the survey (orphans, mother of small children, single parents), but they do not fare worse than the population on average.

2.20 The survey conducted by the IFRCRC in May, 2000 is a first and the only comprehensive dataset that allows to measure the living standards of Internally Displaced Persons as compared to the local population. The survey found that IDPs face slightly

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32 This was the first ever national sample of IDPs, covering all regions of the country as well as a wide range of topics, including income, employment, housing and associated factors (water, electricity, etc.), social assistance, credit/savings, household expenditure, migration, education, health, nutrition, some aspects of community development, migration and other demographic characteristics. Comparison of conditions of IDPs with those of the
It also has shown that IDPs are not a homogeneous groups. Households in collective centers were shown to be especially vulnerable in respect of employment and income. There are also clear disadvantages with respect to land ownership and housing conditions. The survey, however, did not find that categories that have a status of "vulnerable" and are therefore entitled to certain benefits are significantly poorer than the rest of IDPs, even based on their income net of all government transfers.

B. FROM THE PROFILE TO UNDERSTANDING CAUSES OF POVERTY

2.21 The previous section has identified several key factors associated with poverty. It was limited, however, by the fact that we explored each of these factors without looking at the links between them. The only way to explore these more complex relationships is to use a multivariate framework, described in Annex II. An example of applying such methodology for international comparisons is given in Box 2.1.

2.22 First lesson from the analysis reported in Annex II is understanding limitation of formal framework for explaining poverty. Using the best “cleaned” data possible our model predicts at best just over a quarter of the actual variation of outcomes (consumption) between households; source of three-fourth of differences between households thus remains unknown. Poverty is very much a result of highly specific circumstances that otherwise identical households experienced. This result has important implications for how far one can improve targeting of social assistance on the basis simple formal criteria.

2.23 The second lesson from the multivariate analyses is that, over time, main factors and risks of poverty were not stable. As a result, the relative importance of each factor was not constant over time. Again, like the first lesson, this conclusion shows the limitations of once set formal criteria to identify the most vulnerable groups.

2.24 The third lesson coming from the table of descriptive statistics in Annex II is that—even in a relatively short period of time—we do observe significant changes in the employment profile of households and the ownership of productive assets. By the end of the period more people were employed in private sector, working longer hours (this factor was especially strong in the period 1997-98), families had more livestock and other productive assets. These were the main countervailing factors working against the increase of poverty.

33 To be able to measure more accurately the poverty status of IDPs and identify the most vulnerable among them, some manipulations of the raw data are needed to make them comparable to the information on the local population. The questionnaire did not included non-cash income, that is the equivalent monetary value of home-grown food or gifts of food. Access to land and livestock is fairly widely spread and affects IDPs as well as local households. We have to make a caveat that the corrections made on the basis of regressions that used SDS data from the SGHH (see annex), are based on certain assumptions and tend to narrow down differences between households.

34 See Luttmer, Background Paper for “Making Transition Work for Everyone".
BOX 2.1. Why the Poor Are Poor: Decomposing the Gap Between the Rich and the Poor.

A recent World Bank regional report on poverty "Making Transition Work for Everyone" suggested to decompose consumption per equivalent adult, the main indicator of whether households are poor or not, into five factors capturing measures of dependency ("mouths"), labor market participation ("labor participation"), labor earnings per worker ("skill"), share of other income in total income ("other income") and ratio of consumption to income, or gap between reported incomes and consumption ("savings"). We can compute the share that the difference in each of the five factors contributes to the overall difference in mean consumption between the top and bottom quintiles. A negative value for one of the factors means that the factor was working in favor of the bottom quintile, i.e., it "helps the poor". Figure 2.8 shows how much of the difference is explained by each factor for three countries across the region.

The top quintile in all three countries has more income earners per adult, higher labor earnings per adult, and a much higher level of "savings" (or unreported income) than the bottom quintile. Labor participation is more important factor in Georgia than in other countries, but it accounts only for 15 percent of the difference in equivalent consumption. "Savings"—which is more a measure of unreported income than true savings out of income—accounts for a high of 42 percent in Russia of the difference in consumption between the top and bottom quintiles. Note that Georgia has in fact the least weight of this unreported income, which indicative of the participation of both rich and poor in the informal sector. There is no differences in the dependency ratios between the rich and poor in Georgia.

What is then the largest component on the gap between the rich and the poor? This is what is called "skill", or the difference in earning per each employee. It shows that the cause of poverty in Georgia more than in other countries is low earnings or underemployment. The fact that the poverty profile is dominated by the working poor is a consequence of that.

Source: Making Transition Work for Everyone.

2.25 To see the relative importance of these factors to forces moving poverty in opposite directions is the simulation that we undertake as a second step of this analysis. We project the poverty for each year using the base year "endowments" and the current level of returns. The results are given in Figure 2.9.

Figure 2.9
Actual and simulated poverty rates under assumption of constant returns

Source: see Annex II.
The conclusion from this simulation is twofold: there was no progress in reducing poverty over the period for two reasons: (i) economic and market conditions have lead to a fall in earnings and returns; and (ii) the rise in offsetting factors (employment and accumulation of productive assets) was insufficiently strong to compensate to a fall in returns.

C. **Labor Market Trends and the Poor**

As the above analysis suggests, labor market status is the leading and the most significant factor affecting household poverty. The 1996-2000 period has seen a stable total employment (see Table 2.1). Analysis of the poverty profile indicates that there were very important changes in the structure of employment, as presented in Figure 2.10.

2.28 Over the period, employment in agriculture and in wage employment in the private firms have expanded substantially. At the same time, employment in SOEs and self-employment outside agriculture have suffered a severe drop. Many of those who found employment as wage earners in the private sector (in urban areas) were previously self-employed. Among those who moved to agricultural self-employment about half were the off-farm self-employed, and half were the unemployed.

2.29 The poor have participated in these shifts equally with the non-poor. What makes them distinctive, though, is that the level of earnings achieved after these transitions remained low and insufficient to pull their families out of poverty.

2.30 To start exploring this issue we look at the main factors determining earnings in the standard earning functions framework. It should be noted that what follows is based on individual earnings reported in the survey, which, as we know, are subject to severe

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*This analysis is based on the panel data, tracing individuals over the year.*
underreporting. We estimate a standard logarithmic earning function (both for monthly and hourly wages) where the vector of independent variables includes those indicating different levels of education, experience, current job attachment and other characteristics.

Table 2.2. Returns to Education (Men—Women Aggregate Estimations)

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<td>21.24</td>
<td>0.15</td>
</tr>
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</table>

Source: SGHH individual record data, pooled for the period 1998-2000. The dependent variable is the real wage in 1996 prices. Items in bold are statistically significant at the 10 percent level.

2.31 The estimation indicates a conventional pattern of returns. Average income is significantly and negatively associated with current attachment to state firms and budgetary sector, agriculture, and social sectors (health and education), as well as a rural location (around 20 percent advantage of urban areas). There is a very substantial and significant difference in pay between men and women.

2.32 Education on aggregate increases earnings. More importantly, quarter-specific coefficients on education are significant particularly during the crisis of 1998-99. It shows how important education was to resist the shock.

2.33 Earnings inequality remained at a high level throughout the period (p90/p10 ratio of around 10, suggesting that a typical "well paid" worker receives 10 times more than a "poorly paid" worker). Earnings inequality did drop somewhat in the period preceding the crisis, but this progress was undone during 1999-2000.

2.34 There are two groups on the labor market which are clearly at a disadvantage: women and IDPs. There is a large and persistent gender gap in earnings between men and women with similar characteristics (by about 10 percent on average, controlling for other factors). The gap is especially wide at the top of the distribution, where there are only a very few highly paid workers: a typical female worker at the top of the earnings distribution (90th percentile) earns only half as much as a male in similar position earns. This contributes to aggravating the gender bias in the labor market which is already evident from the unequal distribution of occupations, which sees women over-represented in semi-skilled positions (80 percent of clerks are women) and under-
represented in senior positions (only 32 percent of managers are women), as reported in Bernabe (2001).

2.35 The plight of the IDPs trying to integrate into the labor market serves as a kind of litmus paper, showing the extent of discrimination, barriers to free entry and informality of the Georgian labor market. The survey of IDPs and the local population suggests that IDPs, and especially those living in collective centers, are severely handicapped as regards employment in comparison with the local population. The unemployment rate of IDPs in private accommodation is twice as high as that of the local population, that of IDPs in collective centers is three times as high. As much as 20 percent of them report being totally excluded from the life of communities where they are located, without access to information about employment opportunities or the connections needed to get jobs. And the jobs they do get are often low paying and insecure. Not surprisingly, all IDP wage earners fall below the 90th percentile cut-off for the local population.

D. REGIONAL DIMENSIONS OF POVERTY

2.36 As the Poverty Assessment indicated, poverty varies significantly by region. While this remains true, there has been a substantial re-ranging by region since 1996 (Table 2.3).

<table>
<thead>
<tr>
<th>Region</th>
<th>Poverty risk relative to average (national poverty incidence = 1.00)</th>
<th>Poverty decomposition</th>
<th>Share in total poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kakheti</td>
<td>1.3</td>
<td>1.0</td>
<td>1.1</td>
</tr>
<tr>
<td>Tbilisi</td>
<td>0.7</td>
<td>1.0</td>
<td>0.9</td>
</tr>
<tr>
<td>Inner Qartli</td>
<td>0.9</td>
<td>0.9</td>
<td>1.3</td>
</tr>
<tr>
<td>Lower Qartli</td>
<td>0.7</td>
<td>0.8</td>
<td>1.4</td>
</tr>
<tr>
<td>Samtskhe-Djavakheti</td>
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<td>0.8</td>
<td>2.1</td>
</tr>
<tr>
<td>Achara</td>
<td>1.2</td>
<td>0.8</td>
<td>1.0</td>
</tr>
<tr>
<td>Guria</td>
<td>1.0</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Samegrelo</td>
<td>0.4</td>
<td>1.2</td>
<td>0.5</td>
</tr>
<tr>
<td>Imereti</td>
<td>1.7</td>
<td>1.3</td>
<td>0.8</td>
</tr>
<tr>
<td>All of Georgia</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Source: SDS SGHH primary data and World Bank. Note: Absolute poverty is the percentage of the population with current consumption per equivalent adult below the “recommended” poverty line.

2.37 The changing structure of the economy and different degrees of exposure to external shocks have produced a very complex dynamic in the regional dimension of poverty.

2.38 Some of the changes that have occurred are remarkable for such a short period of time. Two of the richest regions (Achara and Samtskhe Javakheti) have experienced a sharp decline in per capita consumption, whereas the poorest region (Imereti) has made substantial progress.
2.39 A more detailed look at individual regional patterns unveils the multitude of factors affecting each region. The IDP crisis of 1998 hit Samegrelo, one of the richest regions, especially hard. The effects of the Russian crisis was very pronounced in Tbilisi. The drought and foot and mouth disease has affected Samtskhe Javakheti, followed by Quartli and Kakheti. Quite remarkably, and in line with progress in rising average per capita consumption, Imereti became an only region with consistently falling risk of poverty relative to other regions. However, Imereti now displays growing inequality within the region, especially between more dynamic urban centers and stagnating rural areas, particularly upland villages. Just the opposite is true for Achara, where despite the fall in consumption, more equal distribution between urban and rural areas has prevented a sharp increase in poverty.

2.40 Sharp changes in the relative position of regions highlight the fact that most of them have to rely on their own resources, given the weak fiscal capacity of the central government and consequent lack of fiscal equalization. Unless the situation changes, volatility will continue to play an important role and regional differences will persist. There is also an important lesson to be learned: the relative position of regions is probably likely to continue changing, making targeting based on location problematic, and calling for careful monitoring of regional trends in the future.

E. HUMAN DEVELOPMENT—ACCESS TO EDUCATION AND HEALTH

2.41 There are clear signs that the poor are falling behind in human capital, because they lack resources to afford quality education and health care. The differences in basic access to these services by the poor and non-poor do not appear to be very large. But what matters, especially in a country with weak governance in the public sector, is what beneficiaries get after accessing the service providers. And here we find that the poor are at the mercy of their inability to pay for anything that goes beyond simple attention.

Access to Education

2.42 As we have seen in the previous chapter, the overall picture is that enrollments have been largely sustained in general education but have dropped sharply in pre-school and vocational training. However, enrolment may not always entail regular attendance. Surveys have indicated that attendance has often been sporadic for children in the poorest families, because of lack of the necessary clothing, textbooks, etc., or the need for children to contribute to household subsistence or income generating activities.

2.43 Children of the poorest families may be at a disadvantage in primary and basic education because of inability to afford winter clothing, school meals, school supplies, textbooks, and informal fees (officially voluntary) that are reportedly charged for lower grades in some schools.

2.44 The data collected during the SGHH with the questionnaire on access to health and education services, supported by GSIF in 2000, offer a first chance to look at the pattern of enrollments, attendance and private spending on education, distinguishing between the poor and non-poor. The figures in the table below report enrollment rates by type of education over the population by age group.
Table 2.4. Percent of Children Enrolled in Educational Establishment in 2000.

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Preschool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age under 6</td>
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<td></td>
</tr>
<tr>
<td>Non poor</td>
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<td>26</td>
</tr>
<tr>
<td>Poor</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Secondary School</td>
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<td></td>
</tr>
<tr>
<td>(mandatory)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 7 to 14</td>
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<td>Non poor</td>
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<td>92</td>
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<tr>
<td>Poor</td>
<td>91</td>
<td>94</td>
</tr>
<tr>
<td>Post-secondary study (post-mandatory)</td>
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<td></td>
</tr>
<tr>
<td>Age 15 to 21</td>
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<td>Non poor</td>
<td>64</td>
<td>66</td>
</tr>
<tr>
<td>Poor</td>
<td>51</td>
<td>63</td>
</tr>
</tbody>
</table>

Source: Health and Education Questionnaire of SDS SGHH, average for 2000; Poor are households with current consumption per equivalent adult below the “recommended” poverty line.

2.45 Several conclusions can be drawn from this table. There are only small differences in enrollment rates between the poor and non-poor for mandatory education. However, the gap is large for especially pre-school and post-secondary education, showing the problems poor children tend to face in the accumulation of human capital. Enrollment of the poor in rural areas is particularly low. Girls’ enrollment rates in mandatory education are identical to boys’ rates among the non-poor, but slightly lower among the poor.

Quality of Education

2.46 There are much more profound differences between the poor and non-poor with respect to the quality of education. As the Poverty Assessment demonstrated in 1999, private lessons to complement regular schooling have become essential if children are to get a decent education. Many children take private lessons; rates are higher in urban areas, but even so, 20 to 25 percent of non-poor enrollees in mandatory schooling in rural areas take private lessons (Table 2.5). The high prevalence of private lessons even at the elementary levels suggests that there is a clear teachers' interest to organize these arrangements, and a concern over the quality of education provided in core curriculum hours. Because the poor have less ability to pay for private lessons, and they are the ones disproportionately penalized by the low quality of in-school education.

Table 2.5. Prevalence of Private Lessons for Children Attending Secondary Education

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<tr>
<th></th>
<th>Urban</th>
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</tr>
</thead>
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<tr>
<td></td>
<td>Female</td>
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<td>Non poor</td>
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<tr>
<td>Poor</td>
<td>19</td>
<td>19</td>
</tr>
</tbody>
</table>

Source: Health and Education Questionnaire of SDS SGHH, average for 2000. Note: Among those enrolled in school Poor are those with the current consumption per equivalent adult below the “recommended” poverty line.

2.47 The poor quality of education, and lack of resources to run the educational facilities properly create disincentives for regular attendance. Table 2.6 below makes it
clear that the poor do miss classes more frequently. Among those enrolled, boys tend to miss school more than girls.

<table>
<thead>
<tr>
<th>Table 2.6. Percentage of Enrollees Missing School</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Non-poor</td>
</tr>
<tr>
<td>Poor</td>
</tr>
</tbody>
</table>

**Source:** Health and Education Questionnaire of SDS SGHH, average for 2000  
**Note:** Data for those aged 7-14, missing class for more than 30 days during the last school year. Poor are those with the current consumption per equivalent adult below the “recommended” poverty line.

2.48 For the poor, the reasons for missing school turn out to be less strictly economic (7 percent of poor children are not enrolled or missing owing work, and 18 percent give the lack of money as the reason for missing school), and more to do with features of the system itself (i.e., absenteeism of poorly paid teachers, lack of heating, excessive distance).

<table>
<thead>
<tr>
<th>Table 2.7. Reason for Not Being Enrolled or Missing School for School Age Children (7 to 15 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Non-Poor</td>
</tr>
<tr>
<td>At work</td>
</tr>
<tr>
<td>No teacher, no heating, too far</td>
</tr>
<tr>
<td>Lack of money (clothes, transport)</td>
</tr>
<tr>
<td>Health &amp; other</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

**Source:** Health and Education Questionnaire of SDS SGHH, average for 2000. Poor are those with the current consumption per equivalent adult below the “recommended” poverty line.

### Access to Health Services

2.49 The Poverty Assessment found that the poor and non-poor alike face economic constraints in accessing the health care system. Consequently, the average Georgian family tends to postpone medical treatment until a very acute condition develops.

2.50 Self-reporting is one way to assess health status, although it is clearly a subjective one. In a two-month reference period of the survey, almost one-fifth of respondents reported at least an episode of illness that impaired their daily activities. Once sick, the poor are less likely to take advantage of medical services and rely primarily on self-diagnosis and self-treatment.

2.51 Among those who need some treatment, not all receive it. Table 2.8 below reports indicators of access: percent of those who effectively received medical help among those who needed and wanted to receive treatment. The table clearly shows that a substantial fraction of both poor and non poor go untreated while ill—a situation that eventually may lead to a deterioration in the health status of the population as a whole.
Most of those not receiving medical attention reported lack of money, lack of proper facilities or absent medical personnel as the main cause.

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
<th>Non poor</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Women</strong></td>
<td>76</td>
<td>70</td>
<td>80</td>
<td>74</td>
<td>69</td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td>79</td>
<td>75</td>
<td>69</td>
<td>67</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Health and Education Questionnaire of SDS SGHH, average for 2000. Poor are those with the current consumption per equivalent adult below the “recommended” poverty line.*

2.52 Two additional findings give significant cause for concern. First, the poor were much less likely than the non-poor to use pre-natal checkups or birth services. Second, as many as 8 percent of mothers with children under the age of 1 report not having had their children vaccinated.

**F. PERFORMANCE OF THE SAFETY NETS OVER 1996-2000**

2.53 As we saw in Chapter 1, none of the many social assistance programs run by the Government and NGOs, with the exception of pensions, is large enough to have a big impact on the living standards of the population. It is important to make a caveat that the survey data capture general trends and do not offer a large enough sample to assess special programs that are targeted to particular groups. Special instruments and samples are needed to measure the efficiency of these programs and their impact on beneficiaries (see Box 3.1).

2.54 Therefore, in this section we attempt a more limited comparison. We aggregate social assistance programs run by the State (excluding pensions), and compare their overall performance with the performance of pension system. The success (or performance) of social assistance arrangements (assuming that pensions also may have an objective of reducing poverty) is measured in the table by how much of the (pre-assistance) poverty gap is eliminated (effectiveness), and how much of disbursed social assistance is received by the poor (efficiency). The Table 2.9 shows that over time there has been a substantial expansion in the number of social transfer recipients, but reduction in their overall efficiency and effectiveness. In addition, the system suffers from an increasing exclusion error.

2.55 The key conclusion from the table is that non-pension transfer system cover only a small fraction of the poverty gap. In addition, a lot of resources leak to the non-poor. In fact, pension system, whose objective is not explicitly to eliminate poverty, has a slightly better targeting performance. System characteristics clearly show that both arrangements do suffer from big targeting errors, and these are not improving significantly over time. The private safety net does not fill in full the gaps left by the public safety net: as many as 70 percent of the poor are not included in such private transfer networks, and only 10 percent of private transfers is received by the poor. This analysis demonstrates that private safety arrangements carry the risks of a substantial number of people falling through the cracks of the system.

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36 As in Braithwaite, Grootaert and Milanovic (1999)
Table 2.9. Comparison of Performance Indicators for State Transfers

<table>
<thead>
<tr>
<th></th>
<th>Non-Pension State Transfers</th>
<th>State Pensions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>System characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of recipients not poor (error of inclusion)</td>
<td>51.6</td>
<td>47.8</td>
</tr>
<tr>
<td>Percent of poor not receiving transfer (error of exclusion)</td>
<td>90.7</td>
<td>82.7</td>
</tr>
<tr>
<td>Percent of poor households according to official poverty line</td>
<td>50.2</td>
<td>51.8</td>
</tr>
<tr>
<td>Percent of all households receiving transfer</td>
<td>9.7</td>
<td>17.4</td>
</tr>
<tr>
<td><strong>System performance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficiency: percent of transfer received by the poor</td>
<td>48.4</td>
<td>47.3</td>
</tr>
<tr>
<td>Effectiveness: transfer to the poor as % of poverty gap</td>
<td>1.0</td>
<td>0.6</td>
</tr>
<tr>
<td>Recipients' percent of poverty gap eliminated</td>
<td>11.6</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Note: SDS SGHH. Official poverty line and consumption per equivalent adult are used as poverty indicators.

2.56 It is informative to compare this overall assessment with the performance of a small subprogram of social transfers: poverty benefit. It was introduced in the beginning of 1998 to include households comprised of non-working pensioners without a breadwinner. Figure 2.11 demonstrates that in fact this group has one of the highest poverty risks. Selection of a good proxy for poverty granted a reasonably good targeting, but the allowance was paid sporadically, suffering from persistent payment arrears; this program remains a small fraction of the State non-pension transfers. Targeting benefits to very specific groups of the poor while sticking to the payment discipline may be the only feasible strategy for improving performance of the system as a whole. Figure 2.11 shows that there are other relatively easily identifiable groups, to which poverty benefit can be extended: for example disabled in families with many children.

Figure 2.11

Poorest groups of the population: incidence with various lines and the number of people (2000)

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of family members (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single parents with 2+ children</td>
<td></td>
</tr>
<tr>
<td>Refugees in private accommodation no one employed</td>
<td></td>
</tr>
<tr>
<td>Families with 3+ children with no one employed</td>
<td></td>
</tr>
<tr>
<td>Severely disabled w/o employed family members, no children</td>
<td></td>
</tr>
<tr>
<td>Families composed only of severely disabled with 3+ children</td>
<td></td>
</tr>
<tr>
<td>Single pensioners without any earnings, but not disabled</td>
<td></td>
</tr>
<tr>
<td>Single pensioners - disabled</td>
<td></td>
</tr>
<tr>
<td>Families with 3+ children and some disabled members</td>
<td></td>
</tr>
<tr>
<td>Orphans in families (non-institutionalized)</td>
<td></td>
</tr>
<tr>
<td>Average family</td>
<td></td>
</tr>
<tr>
<td>Unemployed single parents with one child</td>
<td></td>
</tr>
<tr>
<td>Refugees in private accommodation with employed members</td>
<td></td>
</tr>
</tbody>
</table>

Source: SDS SGHH
G. Analysis of the Impact of Pension Arrears on Living Standards

2.57 The analysis in the previous section demonstrated the importance of pensions—by far the largest transfer program—to alleviate poverty. Although Georgia inherited a comprehensive mandatory pension system from the former Soviet Union, the current system has been greatly simplified and reduced. In early 1995, with the system on the verge of collapse, the Government introduced a flat benefit whose level was irrespective of retirees earning and contribution history or type of retirement. Furthermore, in February 1996, the retirement age was increased by 5 years, and in April 1998 early retirement was abolished. Finally, all men and women with less than 25 and 20 years of service respectively are entitled to the same benefit but at the age of 70 and 65.

2.58 The current level of the pension flat rate benefit is extremely low. It has been regularly increased from 9 laris/month in 1996 to 14 laris/month at the beginning of 1998, but it has not been adjusted since then. As a result, while it represented 16 percent of the poverty line in 1996, and rose to 26 percent in the third quarter of 1998, it was only about 23 percent in 2000.

2.59 Despite the low level of benefits and the drastic cut in the flow of new retiree beneficiaries, the system has been continuously beset by financial problems. There is no quarter in the period under review in which some households do not report arrears in pension payments. The graph below shows that the share of households reporting arrears increased sharply at the end of 1998, as a result of the drop in government income during the Russian crisis. But the position did not improve subsequently until the very end of the period; more than two thirds of pensioners still suffered arrears in 1999 and the 3 first quarter of 2000.

![Figure 2.12](image)

Source: SDS SGHH

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37 War invalids, war veterans, and victims of repression receive higher level of benefits of 35 to 45 lari per month, but their number is relatively small. They represented only 9.4 percent of the total number of pensioners receiving benefits in the last quarter of 1998 (see pension paper).

38 In fact paid benefits represented only 11 percent of the poverty line, since 3 laris was taken at the source to pay for utilities (as a budget transfer to the energy distribution companies).
2.60 Despite its problems, however, the current pension system seems to play a crucial role in reducing poverty. Other things being equal, if pensions had not been paid, poverty rates would have been 9 to 21 percent higher over the period. Such a result is quite remarkable, especially when it is compared with the amount of resources spent on the system. Depending on the period, each percent of pension expenditures helps to eliminate 3.1 to 7.2 percent of poverty among the total population. But, as Figure 2.13 indicates, the efficiency of the system declined in the latter part of the period owing to growing arrears.

2.61 These results suggest that although benefits are low they have a positive welfare impact on the population, and specifically that they help the part of the population that is vulnerable to poverty. The corollary, however, is that rising arrears have disproportionately hurt the most vulnerable groups.

2.62 Even if benefits are low, when paid regularly they make a difference, and when they are not paid regularly they require the poor to adjust their way of living and find some coping strategies. Such coping strategies may undermine future reliance on private support mechanisms. For example, being able to visit and invite neighbours, exchange of gifts is an important way to establish and maintain the net of reciprocity that allows to live through hard times. When pensioners have no cash to afford such gifts, they are likely to enter the spiral of isolation and impoverishment.

2.63 The incidence of arrears is not equally distributed among regions. Pension Fund collection of income has been done at a regional level for most of the period under review. Revenues collected are first used to pay pensioners at the regional level. Usually, Tbilisi, the richest region, produces a surplus that provides most of the required resources to pay benefits in the other regions. But this surplus does not generally fill the gap between revenues and requirements. The general budget should cover the gap, but it has consistently failed to do so, leading to the consistent arrears already noted.

Figure 2.13

Percentage of poverty eliminated per percent of pension expenditures

Source: SDS SGHH
2.64 The prevalence of non-pension income in families where pensioners predominantly live makes it difficult to show the impact of increasing arrears on pensioners. In the period of high level of arrears in 1999 and 2000, poverty rates do not differ substantially between pensioners affected or not by arrears, or between pensioners with or without land. Poverty sharply increased, however, among pensioners with no land and no breadwinner (mostly in Tbilisi) who suffered from arrears, compared to similar pensioners who did not suffer from arrears. In 1999, the poverty rate was about 10 points higher in the first of these two groups.

2.65 Figure 2.14 illustrates the results of a simulation of the poverty rate over time if pensions had been paid without delays, compared to the actual rate. It illustrates the expected result: even with a low level of benefits, prompt payment of pensions would appreciably lower the poverty rate. This suggests that putting the pension system on a sound footing should be a priority for poverty reduction.

Figure 2.14
Simulating the poverty impact of timely payments of pensions

Source: simulations using SDS SGHH
3. PUBLIC ACTION TO REDUCE POVERTY

3.1 In this chapter we begin by reviewing the continuing relevance of the anti-poverty strategy recommended by the Poverty Assessment. Then we look at the likely evolution of poverty in Georgia over the next years under different macroeconomic scenarios and given the changes in poverty in the recent past described in this study. We conclude by proposing an agenda for developing a poverty alleviation strategy with clear priorities, based on the experience of the recent past and the general framework for public action as outlined in the Poverty Reduction Strategy of the Georgian Government.

A. STRATEGY FOR POVERTY REDUCTION: THE WAY FORWARD

3.2 The first chapter of this report reviewed economic factors which were the key drivers of changes in living standards over 1997-2000. Its main contribution to deepening our understanding of poverty consists in including risk and vulnerability as factors influencing people's welfare. The second chapter used a broad analytical framework for analyzing poverty, based on the interaction of assets, returns to assets, and volatility of these returns, and including social as well as economic dimensions of poverty.

3.3 The analysis of both chapters leads to policy recommendations. The key conclusion is the reconfirmation of the validity of the key elements proposed in the Poverty Assessment. The Government's interim “Poverty Reduction and Economic Growth Program (PREGP)” and draft of the full program include these elements. This section explains why these key elements remain essential to achieve a progress in poverty reduction, and advocates the inclusion of empowerment in the set of key elements for poverty reduction strategy.

3.4 First, macroeconomic stability and broad based growth remain key to poverty reduction. Georgia's experience in 1997-2000 amply demonstrates that not all growth is pro-poor, and that poverty reduction in a growing economy should not be taken for granted. The increase in poverty between 1997 and 2000 was driven by two major macroeconomic factors: relatively modest growth concentrated in a narrow set of industries, and increased volatility in the economy. Prudent macroeconomic management is crucial for a more broad-based pattern of growth. It should be complemented by creating an enabling environment for private investment. And since growth will inevitably be much faster in some areas than in the others, fiscal redistribution mechanisms should be enforced to help to share the benefits reaped by the early sources of growth while minimizing negative incentives.

3.5 Second, the majority of the poor in Georgia are still and increasingly working families, and predominantly those in the informal sector. More people are now at work than before, and the private sector is increasingly the main source of livelihoods, but the low productivity of many jobs (in both the formal and informal sectors) does not allow many workers to pull themselves out of poverty. To break the pattern of low investment, low productivity, and poverty, a positive dynamic of mutual reinforcement between formal and informal sector growth should be set in motion. While many Government programs, including the I-PRGEP, are based on the assumption that the informal sector is
a negative force, it helps many of the poor the ability to survive. The problem is that it often offers few prospects for rising out of poverty. Creating a good investment environment should not exclude the informal sector. Poor families will get direct and indirect benefits from a good investment environment: their chances of finding jobs in expanding formal sector firms will increase, and at the same time, formal sector expansion will create new demand for informal sector products, and at better prices.

3.6 This leads us to the third broad trend observed over the period: lack of improvement (or even deterioration) in the investment climate for micro enterprises and non-agricultural family businesses. This lack of progress has been responsible for the gradual long-term deterioration of living standards in rural areas. One of the key factors in this deterioration was an increasingly severe shortage of energy, especially electricity and heat, during the whole period under review. In addition to being an important indicator of the standard of living per se, the level of energy consumption has been a major bottleneck for economic output, in rising labor productivity, provision of education and health services, etc.

3.7 In addition to building on the analysis contained in the Poverty Assessment, this study has expanded the understanding of poverty in Georgia by including issues of risk and vulnerability. This broader view of poverty has important policy implications.

3.8 On the one hand, in the context of this broader understanding of poverty, targeting the poor in government programs becomes much more complex and problematic. Indeed, if these programs are targeted at the “chronically” poor, they will omit the much larger fraction of the population, that, as we have shown, experiences episodes of poverty; but designing the programs to assist this latter group requires an impossible task to set up an almost perfect system of monitoring changes in the welfare of beneficiaries—something Georgia is very far from. Poverty reduction efforts directed towards these two very different groups must therefore have very different characteristics. Achieving the right balance between them is a complex task that depends on the relative importance of the two categories and the amount of available resources.

3.9 While correct identification of the poor based on a limited set of observable characteristics for targeting social assistance is a very difficult task in the context of Georgia, the impact of existing government programs and policies on the poor can be evaluated. The analysis in this report has that appropriate and timely payments within existing programs would yield very large benefits to the poor. Arrears on pensions and social benefits have contributed strongly to the increase of poverty in the period and should not continue. Improved fiscal management and effective implementation of existing programs is a priority in the social protection area.

3.10 As we have shown, while only a small proportion of the population is chronically poor, there are many more Georgians who are vulnerable to poverty and would therefore support programs that reduce the risk of poverty they face. This creates a pre-condition for a broad-based coalitions in support of poverty reduction strategies.

42
3.11 Finally, the inclusion of vulnerability and risk as dimensions of poverty lead us to another very important policy conclusion. It is the key importance of empowerment, of equipping the poor with the right skills and capabilities, creating conditions for better insurance against risks and catastrophic events, and enabling them to shape their own lives.

3.12 We showed in Chapter 2 that there are reasons to be concerned about the long-term consequences for poverty related to the poor quality of basic services, primarily in health and education. The fact that the poor cannot pay providers for quality services is especially worrisome. Equal access to educational opportunities and health care—a key element of empowerment—is at risk, with schools and health clinics in poor districts literally falling apart because of absence of maintenance, and with extremely low provider salaries and lack of provision of ancillary inputs through the budget leading to demands for informal payments, jeopardizing the quality of services for the poor. This leads us back to the list of elements proposed in the Poverty Assessment: the need for improvement in public services provision points to the importance of sustained fiscal effort as a prerequisite for poverty reduction. If a coherent expenditure framework with clear prioritization of social spending is to become a reality in Georgia, then revenue mobilization must be enhanced, based on fairer burden sharing (especially having the richest individuals and corporations paying their tax obligations in full).

B. POVERTY PROJECTIONS: FRAMEWORK FOR A STRATEGY

3.13 How far can growth go in reducing poverty over a foreseeable time horizon? Table 3.1 explores what would happen to the poverty rate next year, in three years and in ten years under various growth scenarios.

3.14 To put these simulations in context, it is important to note that the macroeconomic framework underpinning the PREGP projects a steady improvement in the growth performance of the economy, ranging from the current 1.9 percent annual growth of real GDP to 3.5 – 10 percent in “pessimistic” and “optimistic” scenarios. However, real private consumption per capita is expected to grow at a consistently slower pace, reflecting heavy debt burden and the need to invest. This simple simulations shows that to achieve a basic target of halving poverty by the year 2015, the economy needs to sustain a growth rate of private consumption of 3 percent p.a.

Table 3.1. Poverty Projections

<table>
<thead>
<tr>
<th>Annual growth</th>
<th>Current Status Poverty Rate (Average Quarterly)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 year</td>
</tr>
<tr>
<td>-2%</td>
<td>24.0</td>
</tr>
<tr>
<td>0%</td>
<td>22.8</td>
</tr>
<tr>
<td>+2%</td>
<td>22.2</td>
</tr>
<tr>
<td>+4%</td>
<td>21.5</td>
</tr>
<tr>
<td>+6%</td>
<td>20.7</td>
</tr>
<tr>
<td>+8%</td>
<td>19.9</td>
</tr>
<tr>
<td>+10%</td>
<td>19.2</td>
</tr>
</tbody>
</table>

Note: These projections assume that equivalent consumption inequality remains constant. In other words, everybody experiences the same real consumption growth. Quarterly consumption per equivalent adult compared to “recommended” poverty line. Average over 4 quarters of 2000, one (first) observation per household.
3.15 The critical assumption underlying the projections in Table 3.1 is that growth is evenly distributed. In other words, everybody, both rich and poor, experiences the same real consumption growth rate; poverty reacts with the same elasticity to changes in the mean and in the distribution. Thus, if inequality (Gini coefficient) were to worsen at a rate comparable to the growth rate of consumption, growth would have no impact on poverty. This is a very plausible scenario at low growth rates; as reported in Chapter 1, during 1997-2000, changes of the Gini coefficient in the order of 2-3 percent per year were typical. On the other hand, similar improvements in Gini coefficient could practically double the impact of growth on poverty.

3.16 As the Table shows, over the longer term, sustained growth can substantially reduce poverty rates. Again, these poverty reductions will only materialize if those at the bottom of the distribution share at least equally in the benefits of growth. Therefore, while setting targets for poverty reduction and monitoring progress, one needs to look jointly at both measures of both growth and inequality.

3.17 The Table also shows that changes over the short term will be hard to measure with adequate precision if growth remains low. In interpreting Table 3.1, it is important to remember that poverty is measured within a margin of error of ±2 percentage points, making evaluation of performance in poverty reduction difficult under a modest growth scenario (i.e., 2 percent p.a.).

3.18 Table 3.1 also shows that, over the short term, growth within the I-PREGP macroeconomic framework can have only a limited impact on poverty, and other policies are therefore needed. Is there any way to enhance the impact of growth on poverty? Table 3.2 (below) approaches one aspect of the issue by estimating the differential impact on poverty of different sources of growth.

3.19 Table 3.2 shows that the poverty impact is strongest for increase in transfers; increasing State transfers (which are primarily limited to pensions) in the amount of one percent of total income would reduce poverty by 4 percent. This result points to the importance of protecting the real value of existing transfer programs from arrears and sequestration: poverty increases as strongly per unit of reduction in transfers as it falls in response to their increase.

3.20 Agricultural income comes second to transfers in terms of its ability to reduce poverty. This points to finding ways to improve the productivity of agriculture. Wages follow closely, with a high elasticity of 2.3. Self-employment incomes are currently concentrated among the non-poor and therefore have a relatively small impact on poverty.
Table 3.2. Elasticity of Poverty for Change in the Source Equivalent to 1% Change in Total Income

<table>
<thead>
<tr>
<th>Income types</th>
<th>Share in total income</th>
<th>Poverty in 3 years with 10% growth of an income source</th>
<th>Poverty reduction (%) per equivalent 1% of total income growth*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages</td>
<td>17%</td>
<td>13.1%</td>
<td>2.3</td>
</tr>
<tr>
<td>Self-employment</td>
<td>8%</td>
<td>14.4%</td>
<td>1.7</td>
</tr>
<tr>
<td>&quot;Unreported&quot; income</td>
<td>30%</td>
<td>12.8%</td>
<td>1.5</td>
</tr>
<tr>
<td>Farm income</td>
<td>9%</td>
<td>13.9%</td>
<td>2.6</td>
</tr>
<tr>
<td>In-kind income</td>
<td>21%</td>
<td>12.4%</td>
<td>2.5</td>
</tr>
<tr>
<td>State transfers</td>
<td>3%</td>
<td>14.5%</td>
<td>4.0</td>
</tr>
<tr>
<td>All earnings</td>
<td>33%</td>
<td>11.9%</td>
<td>1.9</td>
</tr>
<tr>
<td>All agricultural income</td>
<td>30%</td>
<td>11.7%</td>
<td>2.3</td>
</tr>
<tr>
<td>All transfers</td>
<td>6%</td>
<td>13.6%</td>
<td>4.4</td>
</tr>
<tr>
<td>TOTAL INCOME</td>
<td>100%</td>
<td>6.5%</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Income poverty in 2000: 15.0%

* This is an average elasticity of poverty over the whole interval of change, the point elasticity (for infinitely small changes of income) for total income estimated with POVCAL is 2.4

C. POVERTY REDUCTION STRATEGY: CHALLENGES AND PRIORITIES

3.21 The actions proposed in the Government’s interim and full (draft) “Poverty Reduction and Economic Growth Program (PREGP)” to address poverty are in line with the recommendations of the Poverty Assessment and are also consistent with the findings of this report. This section intends to link the priorities as outlined in the Government strategy to poverty profile in Georgia. In doing so, it will address a key gap of the strategy: absence of a comprehensive fiscal program to support the intended prioritization of actions. In decision making over the allocation of public funds to fight poverty in Georgia there is still a missing component: efficiency of current policies is limited by lack of information on their impact on the poor.

Priority A: Macroeconomic Stability and Private Sector Development

3.22 Given the evolution of poverty in Georgia in 1997-2000, this report reaffirms the centrality of broad based (pro-poor) growth to poverty reduction. This in turn requires: (a) macroeconomic stability, and (b) building a better investment climate that would lead to sustainable private sector led growth.

3.23 To achieve macroeconomic stability, the Government must maintain its commitment to price stability and a floating exchange rate. To achieve this, the authorities will have to adopt a prudent monetary policy which will limit credit to the Government and aim to increase international reserves. Maintaining macroeconomic stability is in line with the Government’s intention to seek a restructuring of Georgia’s foreign debt, and its commitment to timely debt servicing.

3.24 To build a better investment climate, the following measures need to be implemented:
• Completion of the reforms initiated to support the as-yet incomplete restructuring of the economy: land and enterprise privatization, bankruptcy legislation, and improved governance and management of remaining state-owned assets;

• Removal of constraints on private sector development: improvements in the business environment (e.g., tax policy and administration, de-licensing), provision of critical public infrastructure and services (access to credit, energy, extension services, irrigation, roads), and ensuring adequate quality of the labor force; and

• Improve the institutional framework (including legal, regulatory, tax administration and policy-making capacity).

3.25 The development of SMEs will be a key indicator of success in building an enabling investment environment. Small scale activities are very vulnerable to an adverse investment climate. They suffer as much as, or more than, other from the consequences of weak governance, malfunctioning infrastructure, and instability. Within this list, improving access to basic infrastructure, particularly in poorer areas, is of the highest priority.

3.26 A number of sectoral studies are needed to address information and knowledge gaps. Assessing the impact of infrastructure investment on welfare and ultimately—on poverty—is important to be able to define targets for poverty reduction and for improvement of non-income dimensions of poverty.

Priority B: Public Sector Governance and Strengthening Government Finances

3.27 The I-PREGP recognizes, more convincingly than any prior policy statement had done, that good governance and the fight against corruption are essential elements of the Government’s economic strategy, while also highlighting their role in promoting social development. Progress in this area is key for implementation of Georgia’s poverty reduction strategy. Among many directions of reform, the following are likely to have the highest impact on poverty:

• Continued privatization and regulatory reform is one of the most effective ways to improve governance in the public sector. The Government’s intention, expressed in the I-PREGP to make the reform of public utilities a priority, including privatization or management by private operators, is a right choice from the point of view of poverty impact. In the energy sector reform is critically important for combating corruption, removing a very large quasi-fiscal threat to macroeconomic stability, and encouraging private sector development and growth;

• Local Governance. There is urgent need to strengthen local government’s ability to deliver services to the poor; and

• Over the longer term there is a need for addressing the difficult area of corruption in the public sector. The Anti-Corruption program adopted by the Georgian Government is a significant step in the right direction, but it will be
politically difficult to implement. However, failure to achieve its proclaimed objectives would result in serious further erosion of the Government’s credibility, particularly given the population’s deep cynicism and mistrust.

3.28 Improvement of governance also requires the command of adequate resources. From the point of view of poverty alleviation, it is essential to strengthen fiscal management for two additional reasons: (i) it helps to ensure that enough resources are allocated to pro-poor social programs; and (ii) it helps to stabilize the economy, increasing its resistance to shocks and diminishing their impact on the poor. Both sides of the budget need to be strengthened:

- Revenue mobilization. It is essential that Georgia improve its very weak revenue collection performance to finance inter alia critical human development and public infrastructure rehabilitation programs; and

- Expenditure management. Improvement in expenditure management is also essential for fiscal sustainability, and to ensure that scarce funds are spent on priority poverty reduction initiatives.

3.29 This report has demonstrated that strengthening pension and overall social protection administration and finance is of special importance for addressing poverty. Over the period under review there was a substantial accumulation of pension arrears. Our analysis finds that simply paying pensions on time will lead to a reduction in poverty incidence by 5-10 percentage points.

3.30 As a second order priority there is a need to develop self-targeting workfare programs as efficient "safety ropes" helping to reduce the vulnerability of working poor families—the majority of poor households—to economic and natural shocks. To create conditions for gradual improvements in targeting, a detailed evaluation of the existing social protection programs is required. Such an evaluation will have to address very difficult problems (see Box 3.1).

<table>
<thead>
<tr>
<th>Box 3.1 Evaluation of Poverty Impact: A Case of Poverty Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>As part of the reform of the energy sector (elimination of subsidies for electricity) a special targeted poverty benefit—the first program in Georgia explicitly targeted to alleviate poverty—was introduced in 1999. The benefit was targeted at three categories, which were identified as having a high risk of poverty—single poor pensioners living alone, orphan children (these two groups receive 20 lari per month) and single poor pensioners living in a household (two and more, receiving 32 lari per month per household). By the end of 2000 there were about 45 thousand beneficiary households. The Government was constantly late on the payment of benefits, sometimes for over six months. It constantly questioned why certain categories were targeted, while others were excluded (for example, the disabled or families with many children) despite the perceived need. It constantly raised the question of a limited scope of the poverty benefit, being unable to meet its obligations even for such a narrow set of beneficiaries. Ideally, many of these questions could have been resolved through the evaluation, but the evaluation itself turned out to be controversial. First, since benefits had been paid with constant delays and irregularities, it was difficult to find the right timing to evaluate its impact. Second, the very fact that benefit was focused on a narrow set of beneficiaries made evaluation difficult (benefit recipients constitute less than 5 percent of households). The assessment of the poverty benefit remains to be done.</td>
</tr>
</tbody>
</table>

Source: ESAC team.
A detailed identification of the specific problems of fiscal management would require detailed analysis, such as Public Expenditure and Institutional Review. In addition, there is a need to create capacity to evaluate existing programs by conducting joint reviews of poverty impact and social assessment of proposed policies in partnership with the Government.

**Priority C: Protecting the Human Capital**

Stopping the trend towards the deterioration of human capital is essential to ensure that the benefits of the growth are widely shared. Education and health policies focused on increasing the human capital of the poor is the third priority, requiring a concentrated action in improving the quality of services.

- **Improving quality of education.** The danger is that families who are currently poor or liable to suffer transitional poverty, will remain or become poor into the next generation, if their children are unable to acquire marketable skills—leading, in the longer term, to the entrenchment in Georgian society of a marginalized underclass that is excluded from the benefits of economic growth. Minimizing this danger for the future will require concerted attention now, including a shift in the focus of education policy to providing education of decent quality to all children, not only the most gifted and those who can afford to pay; and

- **Improving equity of health care.** Improvements are needed in the health care financing system (focusing on ways to shift the large amount of out-of-pocket spending from individuals, spot markets to more efficient and equitable systems of risk pooling), particularly with respect to primary health care. Restructuring of tertiary health care is critical for enabling the Government to rationalize the use of already scarce funds and reduce the sector’s over-capacity, to provide desperately needed capital funding for facilities and equipment.

Health and education policies and their impact on the poor are undergoing a thorough review under on-going projects and should remain under close scrutiny for the whole period of implementation.

**Priority D: Empowering the Poor**

This requires insuring the poor against adverse shocks, providing the poor with opportunities to benefit from growth, to reduce their vulnerability by providing adequate safety nets, and to give them voice in key decisions that directly affect them and their families.

Empowerment in this broad sense requires the following: better macroeconomic management to reduce volatility of the economy, education and health policies focused on increasing the human capital of the poor, protecting the resources directed to the poor and vulnerable (including avoiding arrears in transfers), and enhancing participation and human rights. Some of these areas are part and parcel of the agenda for improving
macroeconomic stability, and public sector governance. The analysis of this report shows that macroeconomic instability directly increases an average household’s vulnerability to poverty. Reducing instability-induced fluctuations will substantially reduce the poverty risk and inequality between households. Arrears in transfers—especially in pensions—were responsible for increasing risk and vulnerability and should be put to an end. There are signs that the poor are falling behind in human capital accumulation. The enrollment rates for non-compulsory education (pre-school and tertiary) for the poor are noticeably lower than for other groups. The poor also tend to suffer disproportionately from the low quality of education and health services, absent “side payments” to providers, which poor families cannot afford. Ensuring minimum quality standards in public education and health care is a priority for efficient poverty alleviation and for ensuring that poverty status is not perpetuated. In this section we will concentrate on a more specific meaning of empowerment: giving the poor the tools to manage their own lives.

3.36 The I-PREGP puts participation of the poor among the key objectives of the Government, together with “the elimination of poverty, support to economic growth, improvement of social conditions, [and] raising the living standards of the population.”

3.37 A necessary condition to ensure the inclusion of the poor in the country’s development process is democracy. However, democracies do not necessarily deliver for the poor. Three factors in particular contribute to this problem:

- non-participation of the poor in political processes;
- the importance of ethnic and other identities—the heterogeneity of the poor, and
- lack of effective organization of the poor, especially in rural areas.

Box 3.2. Consultations with Civil Society.

Both the I-PREGP and the Bank’s strategy are being discussed with a wide range of stakeholders in Georgia. Discussions included civil society focus groups in several regions of Georgia, NGOs, the foreign and domestic private sector, trade unions, and major donors. Consultations will continue throughout the preparation and implementation of the full Poverty Reduction and Economic Growth Program. Among key themes recurring throughout these discussions the lack of trust in Government and more broadly—in the democratic institutions is a source of concern.

While the Government has made great strides in communicating with the population regarding its economic reform program and other issues, it is only now beginning to develop both the tools, as well as an understanding of the importance, for a two-way dialogue with civil society. While people are extremely open in sharing their views and criticisms, the overwhelming attitude of society, seems to be one of cynicism about their own ability to influence events. A challenge for Georgia, and her development partners, is to find ways to improve the credibility of the Government and the democratic institutions in the eyes of the population, and to strengthen civil society’s ability to be a partner in reform.

Source: CAS

3.38 One way to address the problem is to encourage the emergence of an active civil society, able to hold the Government accountable to its poor citizens. This is not the case in Georgia due to the Soviet legacy, the breakdown of the rule of law in previous periods, and the inability to combat corruption. Crucial to Georgia’s success in crafting its poverty reduction strategy will be the establishment of regular consultation and dialogue with civil society, and reporting back to society at large on progress and problems.
3.39 A second aspect of including and empowering the poor is the protection of their rights. Therefore, continued support of judicial reforms is an important element of the poverty reduction strategy. The government’s current reform program risks being undercut by judges not being paid on time, political interference in court cases, lack of enforcement of court decisions, and, most critically, by a corrupt procuracy. Collecting adequate information on the situation and formulating specific priorities for action are needed to keep reform on track.

3.40 The third important aspect of empowering the poor is giving them an opportunity to manage programs that directly affect their lives. As we have seen, targeting programs which use formal criteria, such as means testing, have little chance to succeed in Georgia. On the other hand, targeting resources is essential in a situation of very limited resource availability. Giving poor voice and decision making power in managing resources allocated for social assistance might, if properly designed, offer a solution to the dilemma. Therefore, piloting and testing community based schemes for delivering social assistance to the poor should be a part of any strategy that aims at both empowering the poor and use resources more efficiently.

3.41 There is a synergy between achieving broad pro-poor growth, improving public sector governance and finances, and empowering the poor. For example, empowering the poor—through better delivery of public services, provision of effective social protection, and lifting barriers to their participation in policy formulation and implementation—can contribute strongly to growth. Focusing the limited resources (human and financial) available to the Government in these key areas will help to achieve tangible results in poverty reduction.
ANNEX I: POVERTY COUNTS

1. A robust measure of poverty can be a powerful instrument for focusing the attention of policy makers on the living conditions of people. Choices made in setting the poverty line, collecting data and defining welfare measure can matter greatly to the policy decisions. There is no international standard that would fit the circumstances of every country. Different methods, though, can give radically different results for both assessing the extent of poverty and its composition. In practice, each country adopts its own standard official methodology for reporting and monitoring poverty. The purpose of such monitoring is to assess the impact of economic policies on the poor, and to target limited public resources to better reduce aggregate poverty. There are several principles to which a poverty measure consistent with these purposes should follow. In this Annex we compare the practice of poverty measurement accepted in Georgia with such principles.

2. Poverty Assessment described the methodology of poverty monitoring that existed in Georgia by 1998. It also criticized some controversial properties of the "old", official methodology and proposed several improvements for the methodology of poverty measurement. Gradually this new methodology has been accepted, but alongside the old methodology, which continues to play a role of the official poverty methodology. Moreover, several new methods have been used as well. This created a fair amount of confusion about the extent of poverty and its dynamics. The I-PRGEF document has used a framework of old, unrevised official poverty methodology to discuss poverty. Given the existence of multiple lines and pending methodological issues, it is important to revisit the foundations of poverty monitoring in Georgia, which is the main purpose of this Annex.

3. This annex is organized into three large sets of questions in the context of Georgia:
   - When do we say someone is "poor"?;
   - How do we measure “welfare”?; and
   - How do we aggregate data on well-being into a measure of “poverty”?

Definition

4. To make the poverty comparisons, one has to define "poverty". Parameters of poverty methodology are normally set to accord with perceptions of what "poverty" means in a given country. Therefore measurement of poverty is based on "subjective" factors, such as the existence of a well-defined poverty concept. It is also a policy parameter, since in many countries the value of poverty line greatly influences the key minimum social guarantees (such as minimum wage or a minimum pension), and has a direct impact on the social policies.

5. In the broadest definition, poverty is the status of a person who falls short of a level of economic welfare deemed to constitute a reasonable minimum, either in some absolute sense or by the standards of a specific society. Even this broad definition has
specific implication. First, poverty should not be defined just in terms of lack of specific consumption (e.g., too little food energy intake; too little of specific nutrients calories intakes); both the measure of well-being and poverty line should be comprehensive and include food and other non-food necessities. Second, relative and absolute poverty are different concept, and therefore are not directly comparable. The choice between them depends on the perception of welfare. When someone’s welfare is greatly influenced by her or his relative consumption, and not by its level itself, only then the relative definition becomes appropriate.

6. The conventional practice is often contrasted with an alternative, broader, approach. This approach, denoted the "capabilities" approach, was introduced by Amartya Sen. He defined poverty as a lack of “capability” or the inability to achieve certain “functioning” (“beings and doings”). In this view, it is not sufficient to know whether an individual can afford to consume a given consumption bundle, but also to understand what factors might prevent the person from doing so. This broader approach thus suggests that a number of indicators, in addition to income or expenditure, should be examined when assessing well-being. Examples of such indicators might include education levels, indicators of health, and living conditions. Adopting the relatively narrow approach of conventional poverty measures need not imply rejection of this broader perspective. A solid grasp of the many dimensions of deprivation is clearly critical to appreciate how poverty can be tackled. Therefore a number of indicators, reflecting different dimensions of poverty are needed to monitor changes in poverty.

7. Inadequate command over commodities is the most important dimension of poverty, and the key determinant of other aspects of welfare, such as health, longevity, and self-esteem. Therefore working definition for setting the poverty line in Georgia is a definition of poverty as lack of command over commodities expressed in monetary terms.

Poverty Lines

8. There are two approaches to set the poverty line. One using an absolute poverty line, and the other using a relative poverty line. Both a valid methods, and since these two approaches are based on different definitions of poverty, we should expect numbers of poor and even their characteristics to differ considerably between these two approaches. Georgia is using both absolute and relative approaches (poverty line is defined as a percent of the median consumption per equivalent adult in the country) side by side.

9. It is important to note that the absolute poverty line approach is a central one in most countries. There are two good reasons for doing it. One is that for too many countries (and Georgia is not an exception) the relative line set as a fixed percent of the mean or the median may fall short of a level that is deemed as a reasonable minimum. Thus those above and below the poverty line will be regarded as poor. Second, and most important, assessment of the effects of economic growth on poverty has to be based on the poverty line that is fixed in real terms. Relative line rises when incomes are rising and falls in the case of economic downturn following the change sin the mean. This makes the relative line an inconsistent standard for monitoring the impact of economic policies on the poor.
10. The basic and the most often used method to set the absolute line is Cost-of-Basic-Needs, whereby poverty line is defined as cost of a bundle of goods deemed sufficient for "basic needs." When welfare indicator is "command over basic consumption needs", there are two steps to forming sensible poverty lines:

- decide what constitutes "basic consumption needs" in the specific society; this is fundamentally a normative value judgment—setting the bundle; and
- for different groups in the poverty profile of that society, set nominal poverty lines which are just enough to assure that those needs can at least be afforded—costing the bundle.

11. To determine the absolute poverty line, basic norms of living are established, costed out, and anyone with income or consumption below that line is determined to be poor. The poverty line reflects the demographic composition of the household and incorporates adjustments for age, gender, and family size. Since there are no basic standards for clothing, housing, and so forth, it is very difficult to develop objective criteria for these non-food elements of a total essential expenditures package for the poor, and it is defined as a “mark-up” over the basic food cost.

12. A lot of discussion in Georgia around the poverty methodology are around specific levels of consumption of certain commodities. Critics say that the existing official poverty line sets too low (even “indecent”) a standard for a “civilized” society, the new poverty bundle is regarded by them as a further step in this direction. The proponents of the new methodology see it as more realistic, arguing that under the official poverty line the amount of resources needed to close the poverty gap is a multiple of all available public resources; the new methodology is developed as a workable alternative to allocate very limited funds to the most needy.

13. Both sides in this argument miss the point. As we are going to see, norms accepted or proposed for Georgia are in line with other countries, therefore the criticism is unjustified. The poverty line is not a wish or a planning normative. On the other hand, the lack of resources to commit for poverty alleviation is not an argument to abandon a certain adequate poverty line. Key issue is not the precise location of the poverty line but being sure that it is consistent with clearly defined welfare level and is fixed in terms of the living standards indicator. These are exactly the issues, as we are going to see later, for all methods existing in Georgia.

Food Minimum Subsistence Basket

14. A food basket as used here represents the foods needed to provide a diet that allows each person to grow and maintain normal functioning over a 12-month period. The source for the nutrient requirements used in creating this food basket has been the Institute of Nutrition, Academy of Medical Sciences for the "old" or official basket, and the World Health Organization (WHO) standards for the new basket. A lot of discussion is on the exact definitions of these norms. However, what makes the basket

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39 It is important to note that the Georgian Institute of Nutrition never revised its recommended daily allowances (RDA's) and is not adopting RDA's consistent with WHO.
expensive is not the number of calories, but the price of these calories, i.e., the composition of the basket. There are millions of ways how the caloric and nutrient minima could be met. Therefore it is crucial to reflect in the minimum basket actual consumption of the less affluent people rather than "ideal" or "optimal" diet.

15. What could someone living at Georgia's poverty line consume per day? Based on average (all-Georgia) prices, a person living in 1999-2000 would have been able to buy the following food items (aggregated into large groups):

<table>
<thead>
<tr>
<th>Per Capita Daily Allowances for Poverty Bundle: Some International Comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td>KCal/Day Bread, Potatoes Fruits Onions Meats Butter Cheese Eggs Milk Share of Non-food</td>
</tr>
<tr>
<td>gr/day (incl. melted) (no)</td>
</tr>
<tr>
<td>Georgia (official)</td>
</tr>
<tr>
<td>Georgia (new)</td>
</tr>
<tr>
<td>Turkey (unofficial)</td>
</tr>
<tr>
<td>Russian basket*</td>
</tr>
<tr>
<td>Armenian basket</td>
</tr>
</tbody>
</table>

Note: Turkey-Erdogan (1996); Russia-Goskomstat; Armenia-Poverty Profile (1998); * prior 1999. Source: Georgia: Poverty and Income distribution study.

16. Table A 1 shows that Georgia's new minimum subsistence basket is not out of line with comparable countries. Detailed tests reported in the Poverty Assessment demonstrated also that the new basket is consistent with actual consumption patterns of the poor, while the old or official basket is not. This important conclusion of the analysis of the Poverty assessment remains valid.

Non-Food Spending

17. For setting the non-food component of the poverty line Poverty Assessment recommended to use expected non-food spending of those who are just capable of reaching the cost of minimum food basket. One assumes that these households really choose necessities in their non-food spending. Running appropriate regression on 1996-97 data yielded result presented in the table. Repeating this exercise for 1998-2000 data gives similar results, but the estimate obtained is somewhat lower (from 32 to 30 percent), obviously reflecting a general fall in the living standards. However, taking into consideration a confidence interval, one gets a result that is essentially the same as used in the Poverty Assessment.

18. The problem arises in the way how this estimate for the non-food share is applied for the across-time comparisons in the official statistics of poverty. The current practice is to calculate the cost of the food bundle using the current prices and add to this estimated cost a fixed mark up for allowing for non-food spending. This approach implicitly assumes that price index is the same for food and for non-food items. In fact,
the divergence between price indices was very big: over the period of 1997-2000 food prices have increased by less than 10 percent while non-food prices have increased by over 50 percent. Therefore, the existing methodology offers an inconsistent, not constant standard for comparisons over time, which tend to underestimate the increase in poverty.

19. To remedy to the situation, we use in this report a poverty line which is fixed in real terms: we use the current prices to value the (new) food bundle, and we take the values for 1996-97 for non-food component and the non-food price index to keep this allowances constant in real terms. However, as we are going to see, this is only a partial remedy to a host of problems.

Economies of Scale

20. The ultimate goal of economies of scale adjustments is to uncover what level of income is needed for a household of a particular composition to achieve a target level of "utility." Utility, of course, is not an observable quantity. No economist would assume that "utility" could be quantified or measured, let alone be compared across households of different compositions. In order to operationalize the concept of economies of scale, one must rely upon strong and untestable assumptions. Engel's method, which was used for the Poverty Assessment, defines the equilibrating compensation to be the level of income that sets food budget shares equal across households of various compositions. While widely used, this method is known to underestimate economies of scale when the additional household members (usually children) are relatively heavy consumers of food.40

21. The method adopted in Georgia to estimate the economies of scale, which subsequently became part of the social assistance methodology and the official statistics is based on even stronger assumptions. The parameter for economies of scale was calculated based on household survey results and set to achieve a parity in average per equivalent unit (adult) consumption among the households of all sizes. The authors claimed that the household size is a non-economic variable, and therefore is not influencing the welfare of households. The resulting parameter of economies of scale gives a theta of 0.55; much higher than the values estimated with the Engel's method (between 0.85 and 0.65).

22. How to validate this assumptions about so strong economies of scale? One simple way of doing this is a simple consistency check with the non-food share. If we assume that all non-food goods are non-rival in consumption (which is an extreme assumption), the maximum degree for adjusting for economies of scale is the share of food, i.e., in Georgia, the lower limit for theta should be 0.65, and not the existing 0.55.

23. One possible way out here is an empirical fact of bulk discounts for food, which do exist in Georgia, in other words, there are some economies of scale in the food consumption as well. The Poverty Assessment tried to estimate the extent of these

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40 Deaton and Muellbauer (1986, p.741) conclude, "We can construct no plausible defense for the belief that the food share correctly indicates welfare between households of different size, and we do not believe that credence should be given to estimates based on that belief."
economies using an approach proposed by Deaton. The result was that for 1996-97 data each additional family member allows economies in food cost (controlling to the extent possible for quality) of about 8 percent.

24. Using a fixed total poverty line (corrected for prices), given composition of the (new) food basket per equivalent adult (without economies of scale adjustment) we can estimate the cost of purchasing food basket for a household taking into consideration bulk discounts, and we can estimate how much after buying such a bundle of food items, the household would have left over some amounts to put toward miscellaneous non-food items. We also use a regression to allocate all non-food cost into the personal and non-rival collective spending of the household. As a result we obtain that the baseline poverty line (new, revised methodology) would allow each family on the poverty line to spend per each member 2.30 lari per month on essential non-food and services in current (2000) prices and to cover other non-food costs in the amount of 17.5 lari per household.

25. These levels of spending require a good validation using the actual consumption spending, but as they are, there is an inconsistency between the implied and actual scale economies, which is brought out by the Table A 2 below.

<table>
<thead>
<tr>
<th>Household size</th>
<th>Poverty Line, GEL/month</th>
<th>Share of non-food</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>52.68</td>
<td>35.3</td>
</tr>
<tr>
<td>2</td>
<td>82.32</td>
<td>24.0</td>
</tr>
<tr>
<td>3</td>
<td>107.46</td>
<td>19.1</td>
</tr>
<tr>
<td>4</td>
<td>128.53</td>
<td>17.2</td>
</tr>
<tr>
<td>5</td>
<td>145.92</td>
<td>17.1</td>
</tr>
<tr>
<td>6</td>
<td>161.25</td>
<td>17.0</td>
</tr>
</tbody>
</table>

Note: for household with a standard composition, the new poverty food bundle valued at current prices and non-food component fixed in real terms at its 1996-97 level.

26. The lesson from this analysis is that economies of scale certainly exist, and they certainly are controversial, but the key problem is that the current methodology for poverty measurement is internally inconsistent.

Prices

27. We have already mentioned very substantial inconsistencies that arise in taking into account prices of non-food items in the poverty basket. But problems in costing the poverty bundle are not limited to these issues.

28. Since 1996 the poverty bundle is valued using national level average prices for the food items it includes. In addition, costing the poverty bundle is based on price data provided by the system of price statistics, which registers prices in urban areas only.

29. Poverty Assessment provided an estimate of how the poverty profile will be affected if instead of national one uses regional prices. The differences were sizeable enough to warrant an attention and recommend the use of regional prices in the future.
More importantly, the Poverty assessment forcefully recommended to shift from the prices statistics to survey generated unit values to cost the food bundle.

30. The latter recommendation is now followed in what is called an "experimental" or "new" methodology. However, the issue of differences in price level between regions remain untouched in the official or any published data on poverty. In 1996-97 when the first poverty measures were obtained for Georgia the concern was insufficient number of observations to obtain solid disaggregated results. By now, however, there is sufficient data to come up with the official position on the extent of price variation across regions and construct appropriate deflators. Until it is done, any regional comparison of poverty will be biased and will most certainly exaggerate the existing disparities.

Survey of Georgian Households: Welfare Aggregate

31. Common practice to construct the welfare metric (Ravallion) is to add up expenditures on all commodities consumed (with imputed values at local market prices) and deflate by a poverty line (depending on household size and composition and location/date). To achieve a good welfare measurement the following checklist is helpful:

- Use a comprehensive consumption measure, spanning consumption space;
- Include imputed values for consumption in kind (own production, housing);
- Avoid double counting; and
- Use local market prices for valuation

32. As Poverty Assessment argued, the methodology followed by the State Statistical Department of Georgia is sound with respect to the first three items; the latter one—use of local prices—remains a problem.

<table>
<thead>
<tr>
<th>Annual Poverty Status (panel) for 2000</th>
<th>Current Poverty Status (quarterly cross-sections) for 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income poor</td>
<td>Income non-poor</td>
</tr>
<tr>
<td>Consumption-poor</td>
<td>13%</td>
</tr>
<tr>
<td>Consumption-non-poor</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>15%</td>
</tr>
</tbody>
</table>

Notes: Poverty defined using the baseline consumption and income measures.

33. We use consumption poverty as our baseline because consumption is generally considered a more accurate measure of well-being. Table A 3 examines to what extent the group of consumption-poor and income-poor consist of the same individuals. For this purpose, we defined as income-poor those whose income per equivalent adult is below the poverty line. Using the panel data with the adjustment to incomes to allow for
underreporting, about 85 percent of the consumption poor are also income poor. With the reported income and current consumption the overlap is less stronger, as there are too many income poor, but still 86 percent of the consumption-poor are also income-poor. Hence, the correspondence is not quite exact, but for the annual welfare indicators we come up to a conclusion that the same people are poor based on income or consumption.

Survey of Georgian Households: Sampling Issues

34. The sampling of the Survey of Georgian Household is described in a fair amount of details in Poverty Assessment. The sampling has been designed by the Statistics Canada and is probably the best possible way to conduct a random sampling on an outdated frame (Census of 1989). IDPs living in private accommodation is one source of concern, close to 0.8 mln. Georgians who left the country temporarily or permanently since the last Census is another. The sampling procedure allowed for these two problems, and until the new Census will probably remain the most sensible way to select households for a regionally representative survey. As main features of the sampling remain the same, here we will concentrate only on one aspect of the sampling that will require a further examination in the future: non-response bias.

35. The non-response has increased compared to 1996 from around 25 percent to 35 percent. SDS takes non-response into account to correct the original sampling weights at the level of the primary sampling units (the survey has a two stage stratified sample). Each household in a PSU has the same weight (or expansion factor). There are some indirect indicators that rich households are the ones who are increasingly declining the offer to participate in the survey. This can be an explanation of the increasing gap between the survey and the mean consumption from the System of National Accounts, reported in Figure A1. If this is indeed the case (this issue needs to be examined in detail by the statisticians), the current procedure to generate weights may be inadequate and lead to overstatement of the increase in poverty over time.

Figure A1

Quarterly consumption per capita in constant prices: SNA vs. survey data

![Figure A1](image-url)
Survey Implementation

36. The survey has many procedures that are aimed at maintaining the consistency and comparability over time and granting a quality of primary data. The only problematic issue in the survey implementation which hampers comparisons over time was a change in the data collection on the home production of food that occurred in the Fall of 1997. Since that period, only households owning or using land had to fill the corresponding form. As a result, the mean consumption and income have dropped substantially.

37. Figure A2 presents an attempt to build a series that are comparable over time allowing for this change in the survey protocol. It essentially "spoils" data for the first four quarters of the survey to make them comparable with the subsequent period. It essentially shows what this report points at: there was no progress in reducing poverty between 1996 and 2000.

Poverty Measures

38. The survey team regularly reports data not only on the incidence of poverty, but also on the distributionally sensitive poverty aggregates: changes in depth and severity of poverty by main socio-economic groups. As we have seen, such monitoring allows to see important changes in the poverty profile which warrant attention of policy makers (e.g., rural vs. urban areas). The expansion of the survey instrument to include issues of access to health and education and the on-going community survey will add new dimensions to poverty data published by SDS and their relevance to policy makers.

Implications for Poverty Monitoring

39. Despite an impressive progress that makes Georgia one of the countries in CIS with best poverty monitoring capacity, there are many pending issues and progress that compromise the quality of the data obtained. Our brief review of inconsistencies in the existing methodologies leads to a number of recommendations.
40. None of the existing poverty methodologies is adequate for monitoring poverty over time. While the welfare aggregate used is generally in line with a consistent approach to measure poverty, other elements of methodology are far more problematic.

41. A substantial effort is needed in:

- assessing the attrition/non-participation and underreporting bias in the survey;
- redefining economies of scale and or non-food component of the poverty line, which currently contradict each other; and
- taking into account regional differences in price levels;

42. As a remedial (temporary step) for the purposes of poverty monitoring—there is an agreement to correct the existing ("new" or "experimental") poverty line to take into account inflation differential between the food and the non-food spending. However, one has to understand that poverty and living standards monitoring methodology in Georgia needs serious improvements. In light of ongoing efforts to develop poverty reduction strategies—a good sense of data constraints and opportunities is crucial. Improvement of data collection, processing, and analysis, should be an important component of such a poverty reduction strategy.
ANNEX II: MULTIVARIATE ANALYSIS OF POVERTY RISKS

1. The changes in the poverty profile show us complex interactions of various forces, pushing sometimes in opposite directions. The complex and cross-cutting causal forces which determine individual outcomes in any given setting, and which lead to the highly varied outcomes discussed in the report, can be understood in the multivariate framework. This approach will allow us to fully trace the relative impact of changing employment, earnings and demographics on poverty patterns.

2. In the main body of Chapter 2 (poverty profile), we are only able to show correlation between some household characteristic and poverty. This correlation does not necessarily imply a causal link. For example, a correlation between the number of children in the household and poverty may have three (not mutually exclusive) interpretations:

- The number of children causes poverty (causation). As the number of children in the family increases, the same income needs to feed more mouths. This may cause consumption per equivalent adult to fall below the poverty line;
- Poverty causes the number of children (reverse-causation). For example, poor people may have less access (or cannot afford) family planning services; and
- Some “third variable” causes both the number of children and poverty (omitted variable). For example, a certain region may have economically-depressed conditions (causing poverty) and a cultural tradition that encourages having many children.

3. Any correlation between two variables has one or more of these three channels, often referred to as causation, reverse-causation and omitted variables. Based on just simple tables, it is impossible to evaluate the role of each of these three channels. The most common way of estimating impact of each factor in isolation and compare it to the impact of other factors is by estimating an ordinary least squares (OLS) regression of the outcome variable on a set of control variables.

4. The simulation results presented here and referred to in Chapter 2, in which one examines what would have happened to poverty and inequality had returns to assets remained unchanged between the base year and subsequent years, or had endowments stayed the same, are crucially dependent on the econometric models on which they are based. In particular it is important to make sure that the estimated returns are not biased by omitted variables, or other aspects of endogeneity. Since dealing with these aspects is out of scope of the report, we chose to report these results as a mere descriptive tool.

41 However, in our case the outcome variable (poverty) is binary, which makes OLS less appropriate. Alternatively, one could estimate a probit or logit regression, but these rely on strong assumptions about the underlying distribution of equivalent consumption and the interpretation of the coefficients is not straightforward. More importantly, these regression do not utilize all available information concerning the relation between equivalent consumption and household characteristics.
moving the analysis a step forward from simple cross tabulation, but not really exploring much more complex issues of causality. However limited is this exercise, it gives us important insights into relative importance of different factors affecting poverty. One may think of this approach as being an extension of cross-tabulations when one constructs poverty profiles for very narrowly defined sets to be able to control for some factors.

5. To give the intuition behind this approach, we may use a simple illustration of a correlation between poverty, location and the level of education. For example, we may wish to know whether the correlation between living in rural areas and poverty remains the same controlling for education: are people in rural areas poorer because of the rural area, or do people with less education (which is associated with poverty) live predominantly in rural areas. In other words, if we only look within groups of people with the same education level, do we still see that those living in rural areas are poorer? In the simplest way, we get an answer to the question by cross-tabulating education and location and looking at poverty risk in each cell. The multivariate analysis is an extension of this simple example to include many factors simultaneously (instead of just two factors, manageable by a cross-tabulation techniques, we can have as many factors, as we are comfortable with). We choose a two-step approach that yields easy-to-interpret results and that uses all available information on the relationship between household characteristics and equivalent consumption.

6. First, we estimate the relation between equivalent consumption and six key sets of household characteristics using an OLS regression. As we use log of the equivalent consumption divided by the poverty line as a dependent variable, the estimates of the regression are easy to interpret. For example, if the regression indicates that, holding other factors constant, having a university education is associated with a 20 percent increase in equivalent consumption (compared to the primary), we will conclude that this factor reduces poverty. As we do this exercise for four years of data which we have, we will see the dynamics of coefficients and changes in the magnitude and direction of impact for each factor which is potentially associated with poverty.

7. Second, we decompose the impact of endowments and returns using a methodological idea that is straightforward if rather difficult to implement.\(^4^2\) For any family in any given year we estimate what the level of consumption would be if the structure of pay, earnings from family businesses and transfers (both private and public) had been equivalent to that of the base year. Using this method we can see the relative importance of changes in the level and inequality of “returns” versus changes “endowments” for poverty.\(^4^3\)


\(^{43}\) The most difficult part to make this simulations work is to solve the problem of residuals. The predicted level of consumption does not usually give us enough variation to get any meaningful poverty count. We use the regression prediction to find the “residual” that is the difference between the predicted consumption and the actual equivalent consumption controlling for these key characteristics. We then assume that the place in the distribution of residuals for a given year is fixed, and estimate the level of this residual using other years percentiles in the distribution of the gap between the simulated and actual equivalent consumption.
8. More specifically, we run the following OLS regression:

\[
\ln(eqcons_i) = \alpha_0 + \alpha_1 \text{lfpart}_i + \alpha_2 \text{educ}_i + \alpha_3 \text{region}_i + \alpha_4 \text{dependency}_i + \alpha_5 \text{productive assets}_i + \alpha_6 \text{size}_i + \varepsilon_i
\]

where eqcons\(_i\) denotes equivalent annual consumption of a household divided by the corresponding poverty line \(i\), lfp\(_i\) is a set of measures of labor force participation, consisting of a number of variables, including the share of adults employed, the spell of employment and continuity of this employment, the sector of employment, educ\(_i\) denotes a set of variables and dummies for education of the household head and household members, region\(_i\) denotes a set of nine regional dummy variables and a control for location in rural areas, dependency\(_i\) consists of eight control variables for dependency of children and elderly, disabled and other vulnerable groups in the household (the motivation behind this group of variables is to be able to mimic transfers received by “vulnerable” members), and productive assets\(_i\) contains the information on land, main agricultural crops, livestock in possession of a household; size\(_i\) (not reported, but empirically important—see annex) are six control variables for household size. The error term is denoted by \(\varepsilon_i\) and the \(\alpha\)s are vectors of coefficients to be estimated. The estimates and descriptive statistics are reported in the summary table below.
### Results of Multivariate Analysis of Factors Influencing the Level of Household Consumption per Equivalent Adult and Its Variability over Time, 1997-2000

<table>
<thead>
<tr>
<th>Variable</th>
<th>Initial (97)</th>
<th>Change 98/97</th>
<th>Change 99/00</th>
<th>Volatility of consumption during the year 99/00</th>
<th>2000 99/00</th>
<th>2001/02</th>
<th>Endowments change 1998-2000</th>
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</thead>
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<tr>
<td>Share of employed among adults</td>
<td>+ +</td>
<td>+ +</td>
<td>+</td>
<td>0</td>
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<td>-</td>
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<tr>
<td>Mean work spell of employed</td>
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<tr>
<td>Variation of work spells in a year</td>
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<td>-</td>
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<td>1</td>
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<td>Share of farmers among employed</td>
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<tr>
<td>Share of non-ag. self employed</td>
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<tr>
<td>Share of private firms employed</td>
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<tr>
<td>Migrant worker among members</td>
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<td>-</td>
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<td>0</td>
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<tr>
<td>* Household head is a farmer</td>
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<td>+</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
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<td>* Government employee</td>
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<td>0</td>
<td>-</td>
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<tr>
<td>* SOE employee</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
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<tr>
<td>* Private firm employee</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
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<td>-</td>
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<td>0</td>
<td>-</td>
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<tr>
<td>Share of adults w primary education</td>
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<td>Share of adults with higher educ</td>
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<td>Share of members &gt; pension age</td>
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<td>Share of pre-school children</td>
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<tr>
<td>Share of school age children</td>
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<td>&quot;Vulnerable&quot; group persons in HH</td>
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<tr>
<td>Disable in HH</td>
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<td>-</td>
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<td>** Thinr</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>** Inner Quartili</td>
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<td>** Samekh-Eyvakheti</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
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<td>-</td>
<td>-</td>
<td>-</td>
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<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>** Quiris</td>
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<td>-</td>
<td>-</td>
<td>0</td>
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</tr>
<tr>
<td>** Samegrts</td>
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<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>** Inereti</td>
<td>-</td>
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<td>-</td>
<td>0</td>
<td>0</td>
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<td>Rural</td>
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<td>-</td>
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<tr>
<td>Number of cows in HH</td>
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<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Number of livestock heads</td>
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<td>-</td>
<td>-</td>
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<td>-</td>
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<tr>
<td>Number of working animals</td>
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<td>-</td>
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<td>-</td>
</tr>
<tr>
<td>Land area under cultivation</td>
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<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>HH grows * potatoes</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0</td>
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<td>-</td>
</tr>
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<td>- maize</td>
<td>-</td>
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</tr>
<tr>
<td>- wheat</td>
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<tr>
<td>- grape</td>
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<td>-</td>
<td>0</td>
<td>0</td>
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<td>-</td>
</tr>
<tr>
<td>** Household head &lt;56 &amp; &lt;40</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>** Household head \geq 45</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>* Household head above 55</td>
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<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

* Compared to households without active senior, \* compared to Kakheti, \*\* compared to below 35 yr. Other controls: household size, education of household head, length of residence, disabilities in the household, \* increases volatility (at 90% sigl), decreases volatility, \*\* increased returns (or mean endowments) (at 90% level) - returns [or mean] unchanged, \*\* decreased returns [mean, + - positive(negative) sigl at 95%, + - positive(negative) at 90% level, 0 no effect on volatility over the year.

---

64
Regression output

<table>
<thead>
<tr>
<th>Year</th>
<th>R-squared</th>
<th>Adj R-squared</th>
<th>Root MSE</th>
<th>Number of obs</th>
<th>F(55, 2268)</th>
<th>Prob &gt; F</th>
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</thead>
<tbody>
<tr>
<td>1997</td>
<td>0.2232</td>
<td>0.2043</td>
<td>0.46734</td>
<td>2324</td>
<td>11.85</td>
<td>0.0001</td>
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<td>1998</td>
<td>0.2807</td>
<td>0.2626</td>
<td>0.47646</td>
<td>2205</td>
<td>15.54</td>
<td>0.0001</td>
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<td>1999</td>
<td>0.3080</td>
<td>0.2918</td>
<td>0.48328</td>
<td>2410</td>
<td>19.05</td>
<td>0.0001</td>
</tr>
<tr>
<td>2000</td>
<td>0.3154</td>
<td>0.2807</td>
<td>0.48482</td>
<td>1118</td>
<td>9.07</td>
<td>0.0001</td>
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</table>

Averages by years

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<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
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<tr>
<td>Incons</td>
<td>0.74417</td>
<td>0.59203</td>
<td>0.562915</td>
<td>0.539623</td>
<td>0.124097</td>
<td>0.116488</td>
<td>0.115541</td>
<td>0.119298</td>
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<td>Ihhsize = 2</td>
<td>0.180585</td>
<td>0.191301</td>
<td>0.176829</td>
<td>0.163158</td>
<td>0.390565</td>
<td>0.407066</td>
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<td>Ihhsize = 3</td>
<td>0.167444</td>
<td>0.151798</td>
<td>0.169919</td>
<td>0.156725</td>
<td>0.087123</td>
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<td>0.208563</td>
<td>0.200178</td>
<td>0.213008</td>
<td>0.204671</td>
<td>0.112622</td>
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<td>0.119609</td>
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<td>0.143281</td>
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<td>Labor participation</td>
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<td>0.745331</td>
<td>0.716354</td>
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<td>Weeks in employment</td>
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<td>9.209363</td>
<td>8.995668</td>
<td>8.814672</td>
<td>0.400042</td>
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<td>0.504678</td>
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<td>Agric. Workers</td>
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<td>0.465174</td>
<td>0.490525</td>
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<td>0.222814</td>
<td>0.231707</td>
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<td>State sector employed</td>
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<td>0.234433</td>
<td>0.217452</td>
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<td>0.227798</td>
<td>0.228234</td>
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<td>Self employed</td>
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<td>0.157652</td>
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<td>0.084445</td>
<td>0.090048</td>
<td>0.103919</td>
<td>0.459839</td>
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<td>0.185568</td>
<td>0.21802</td>
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<td>0.228234</td>
<td>0.224382</td>
</tr>
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<td>High education</td>
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Bibliography


UNICEF and WFP: Nutritional Status of Children in Georgia: Results from a Survey. 2000


