

Journal of Economics and Business Vol. IX – 2006, No 1 (11-35)

# **POVERTY IN TRANSITION COUNTRIES**

Dirk J Bezemer<sup>1</sup>,

#### Abstract

This paper examines poverty in transition countries in Central and Eastern Europe, the Balkan and former Soviet Union. The outcome of this research emphasized that unemployment, inflation and state desertion generally increased people's vulnerability to poverty, with large regional fluctuations. Poverty is associated with insufficient food and clothing, poor housing, limited access to utilities, poorer health and less access to healthcare, social exclusion, and psychological suffering. Coping strategies include household food production, resource pooling, multiple job holding, migration, dietary and other consumption changes, as well as household disintegration, alcoholism and suicide. Especially vulnerable to poverty are households in remote rural areas, most ethnic minorities, children, women, and single elderly people. Selected studies from Russia and Hungary indicate that there also is a "core" of long-term poor.

KEYWORDS: poverty, transition, vulnerable groups, coping mechanisms

JEL classification: O18, P36

<sup>&</sup>lt;sup>1</sup> University of Groningen, <u>d.j.bezemer@rug.nl</u>. I thank Andrew Shepherd and two anonymous referees for helpful comments that have improved this paper. I accept sole responsibility for its content

## Introduction

The aim of this paper is to analyze the evidence and causes of poverty in the post-socialist transition countries of Central and Eastern Europe as well as former Soviet Union. This includes the 27 transition countries in Europe and north-west Asia; it excludes China, Vietnam, Cambodia, and Cuba. The study includes rates of poverty, poverty trends and their causes, population groups vulnerable to poverty and poverty duration. Both quantitative and qualitative aspects of poverty are taken into account. Because the intention is to consider each aspect of poverty dimensions, the research method is to rely on several sources and data sets from different countries in a review study, rather than to analyze only one set of data.

Poverty, as the Council of Europe carefully describes it, affects 'persons, families, or groups of persons whose resources (material, cultural and social) are limited to the extent that they exclude them from the minimally accepted lifestyle of the countries where they live' (quoted in Revenga *et al*, 2002:11). More concisely, the concept of poverty aims at capturing a lack of well-being, based on decisions on how to define and measure it. Because of data availability and consistency concerns, in this paper the narrower concepts of household-level income or consumption poverty are implied when the term 'poverty' is used (unless otherwise indicated). The implicit decision in this measure is to accept income or consumption as indicators of well-being and to observe it at the household level, even though this may then be translated to per capita income levels based on assumptions of intra-household allocation. Occasionally we will also refer to alternative well-being measures.

In the next section the similarities and differences in the development of economic systems in transition countries are identified. In section 3 quantitative and qualitative evidence on poverty is presented, while in section 4 groups are identified within the transition societies which are especially vulnerable to poverty. In section 5 we examine some evidence of long-term or chronic poverty. Section 6 sums up and concludes.

#### **Transition: Countries and Economic Development**

'Transition' countries are supposed to be in transition from socialism to capitalism. Some of those in Central Europe now indeed resemble Western European market democracies and are ready to join the EU. Others have rapidly deteriorated economically and are now effectively part of the former Third World. Many are currently in limbo between central planning and markets, between rule of law and mafia, and between cronyism and democracy. The only uniting element is their common past as socialist countries. They used to be centrally planned economies. Key features of these systems included: full state or collective ownership as means of production; regulated prices; extensive state transfers; full employment and job security; large equality and stable living standards at the level of middle income countries including free health care and education; shortages in consumer goods; grey markets; economic isolation from non-socialist countries, and officially no poverty. Key references to socialist economies are Nove (1987) and Ellman (1979).

'Transition' implied the dismantling of this socialist system and a move towards a market economy. It occurred in 27 countries within a few years (1989-1992). The reasons for this rapid and monumental change are still debated. The process itself was to a large extent similar in all countries. It dealt with the privatization of enterprises and, sometimes, land (through sale or distribution) and the definition of private property rights; abolishment of most state subsidies and withdrawal of the state from many spheres of the economy; introducing freedom of enterprise, of foreign trade, and of currency convertibility. Some countries, such as the Czech Republic in Central Europe, progressed rapidly on all fronts; others, such as Belarus in former Soviet Union, have barely started. For all, the official goal of transition is economic growth and affluence through market mechanisms. For empirical details and analyses of the transition experiences, we refer to Gros and Steinherr (1995), Kolodko (2000) and Aslund (2002). A brief sketch will be used as background to appreciate the differences in their transition experiences regarding poverty.

*Economies* in *Central and Eastern Europe*<sup>2</sup> have performed best They were relatively wealthy during the socialist era and had a recent history of presocialist mature capitalism; they have a geographical and cultural proximity to Western Europe, and look forward to EU accession. Market reforms were

<sup>&</sup>lt;sup>2</sup> Comprising Estonia, Latvia, Lithuania, Poland, former East Germany, the Czech Republic, Slovakia, Hungary, and Slovenia

understood and rapidly implemented, the transitional recession was short and mild, and growth thereafter considerable. But not all went well: there was a large heterogeneity within this group of forerunners, with income levels varying between 9,509 US\$ per capita in Slovenia, and 3,450 US\$ in Lithuania, and unemployment as high as 20 % in Slovakia. Country averages also typically hid substantial regional and ethnic problems of unemployment and poverty.

The *Balkan states*<sup>3</sup> were much poorer before transition (with the exception of parts of former Yugoslavia). Two of them, Albania and Romania, suffered from extreme isolation, centralization, and economic mismanagement during socialist rule. The Balkan states had less cultural, geographical and historical ties with the Western European capitalist nations. Their 'liberal revolutions' were bloody (in Romania) or delayed (until 1992 in Albania), and the subsequent political systems leaned more towards cronyism and were captured by elite or regional interests. The economic repercussions were delayed reforms and severe crisis, such as the 1996 Bulgarian banking crisis and the 1997 collapse of the Albanian Ponzi economy. Ethnic and political tensions in former Yugoslavia erupted into open war twice during the 1990s, with refugees from Kosovo placing a significant burden on the Albanian economy. The volatile Balkan states are characterized by widespread poverty, organized crime, political instability and pervasive corruption, entrenched elites and slow, but ongoing reforms.

The *Slav post-Soviet States* Russia, Ukraine and Belarus are not so volatile, particularly the last two. Russia, the most visible successor to the Soviet Union, has received extensive technical and financial assistance and has implemented a number of reforms. Still, state ownership remains significant and rent seeking endemic, land is not effectively privatized, and growth of new businesses limited. Russian growth has been volatile and often negative during the 1990s, and suffered a severe crisis triggered by an unsustainable Rouble rate in 1998, the fallout of which spilled over into the other post-Soviet states. Ukraine and Belarus are possibly among the most stagnant of all transition countries in terms of both political changes and economic reforms. All three states share the problems of the Balkan – low growth, poverty, crime, and rent seeking – but miss much of its prospects for improvement.

The *post-Soviet states in the Transcaucasus and Central Asia*<sup>4</sup> have suffered the most from 'transition'. The Central Asian states were poorest and largely

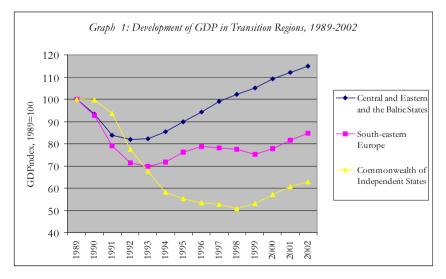
<sup>&</sup>lt;sup>3</sup> Including Romania, Bulgaria, Albania, and the states of former Yugoslavia except Slovenia: FYR of Macedonia, Serbia, and Croatia.

<sup>&</sup>lt;sup>4</sup> Armenia, Georgia, Azerbaijan, Kazakhstan, Turkmenistan, Kyrgyzistan, and Moldova

agrarian prior to socialism. They developed one or a few sectors to export to the Soviet Union, such as cotton in Kazakhstan and wine in Georgia. Heavily relying on Soviet linkages, e.g. for energy, export markets and income transfers, these states were most affected by its disintegration. They were also struck by natural disaster (the 1988 earthquake in Armenia), political instability and ethnic tensions, territorial conflict, and refugee flows (all in Armenia, Georgia and Azerbaijan).

During the transition, the level, distribution, and structure of incomes in the formerly socialist countries changed substantially. To understand poverty impacts, it is useful to distinguish between output (and hence in incomes and consumption) and changes in distribution (increase of inequality), behind which lies a complex interaction of economic, social, and political processes. "The question to answer is not so much whether poverty rose because output collapsed and inequality rose - the answer is an unambiguous yes - but why did output collapse so much more in some countries than in others? And why did inequality follow such different patterns?" (World Bank 2000: 111-112).

Average incomes, as proxied by GDP per capita, first dropped, often dramatically, and then recovered, although very slowly and with occasional drops in many countries (Graph 1).



The graph shows that there are marked differences in development between three transition regions: Central and Eastern Europe (CEE), Balkan Countries

(BC), and former Soviet Union (FSU). CEE income levels have now recovered to above pre-transition values, in contrast to BC and FSU<sup>5</sup>. The reasons for divergent patterns of falling incomes and inequality included unemployment, inflation, wage and pension arrears, the reduction of social transfers and a rise in inequality.

*Unemployment* implies the loss of wage income. Unemployment did not exist in socialist economies, where enterprises were typically overstaffed, even at the relatively low socialist levels of technology. Wages were subsidized by state transfers, so that profitable state enterprises balanced the losses, partly caused by large wage bills, of loss-making state enterprises. The sharp increase in unemployment at the start of transition was caused by the cessation of most state subsidies and the disruption of the economic system, leading to enterprise bankruptcies and large-scale redundancies in surviving enterprises. Official unemployment in 2001 was 2 % in Turkmenistan and Moldova, 4 % in Ukraine, 6 % in Kyrgyzistan, 9 % in Romania and Russia, 17 % in Lithuania and Poland, 20 % in Slovakia and 31 % in FR Yugoslavia, (EBRD, 2002). Obviously low unemployment does not imply good economic performance, as there is a trade-off between reform and enterprise productivity via underemployment.

Inflation was rampant in all of the FSU and BC, and serious in CEE at some time during the transition. It especially reduced the value of wage and pension incomes. Mean inflation in the BC peaked to 246 %, 155 % and 2,284 % and 188 annually in 1990-1993. Thereafter it fell to levels between 10 and 80 %, with the exception of 1997 (258 %) mainly due to the Bulgarian banking crisis producing 1,082 % inflation. High inflation is most persistent in Romania and the FR Yugoslavia (over 35 % annually in 1990-2001). In the FSU, where a bungled attempt at monetary unification in the Rouble zone produced financial chaos, inflation was very volatile and high (over 150 % in most countries) in 1991-1996, and stayed above 30 % until 2000. In Russia, inflation shot up from (repressed) levels of 6 % in 1990 to 1,526 in 1992, 875 % in 1993 and 311 % in 1994. It steadily declined to 28 % in 1998, but tripled to 86 % in 1999 due to the Rouble and Asian crises. In CEE, inflation above 1,000 % annually only occurred in the post-Soviet Baltic states and the regional mean fell below 10 % already in 1996. Poland shows that slowly but steadily declining inflation (over 10 % until 1998, down from 70 % in 1991) need not be an impediment to economic growth (EBRD, 2003).

<sup>&</sup>lt;sup>5</sup> We note that these figures are only a rough approximation of the trends in real disposable household incomes, on which income poverty estimates must be based. Generally, such income measures have recovered less than GDP due to increasing inequality.

*Wage and Pension Arrears* have been particularly severe in former Soviet Union and the Balkan countries (especially Romania). An unsustainable fiscal position, corrupted and dis-functioning bureaucracies, inflexible labour markets, high unemployment and failing financial and payment systems are among the causes.

Social services, public goods and free consumption goods such as health services, security, child care facilities, education, and meals in enterprise canteens used to be widely and freely available in the socialist systems; they effectively constituted in-kind income transfers. Access to it was usually linked to (universal) employment. With the rise of unemployment and the retrenchment of the state, the burden of financing these outlays fell on household budgets. This has decreased disposable incomes.

These changes leading to falling incomes also imply that the *structure of incomes* has changed. Social transfers, informal incomes, and in-kind incomes have become relatively more important, while wages have become relatively less important. As Milanovic (1999: 19) documents, the un-weighted average share of wages in Bulgaria, Hungary, Poland, and Slovenia decreased from 60 % to 47% of total household incomes. The share of pensions and other social transfers increased from 22 % to 29 %.

As to *inequality*, transition has meant a loss of income and well-being for most of the population of the countries discussed here; but for a small group it has been a period of economic improvement. Most citizens of CEE countries, particularly those of Hungary, Poland, and the Czech Republic, have seen their incomes rise since 1989. In the BC and FSU states, a small elite of successful entrepreneurs and the politically well-connected have also gained in wealth and income, sometimes astronomically. Combined with the general impoverishment, this has resulted in a generally large increase of inequality during transition.

An important reason for rising inequality was the redistribution of productive assets and other forms of wealth, and of the income stream connected to it, during the privatization program implemented in various forms in all transition countries. Many of these program were officially egalitarian, such as the voucher privatizations implemented in Russia, the Czech Republic, and Albania. But effective control over enterprises often remained in, or accrued to, a small elite in a position to control privatization design and information flows, and subsequent income streams.

Some other features of the transition have mitigated (though generally not reversed) rising inequality. In most CEE, BC and a few FSU countries household land ownership is widespread. This is a result of the rapid land

reforms implemented during the early 1990s throughout CEE, and later in BC and Armenia, Georgia and Moldova. In most other FSU countries, households have access to land although land privatization has not been implemented. As a result, in-kind income from household food production is common; Bezemer (2001) estimates that two thirds of Russian households are engaged in food production while four fifths rely on home produced food to some extent. Since this income component is typically larger for poorer household, it is income equalizing.

Another equalizing trend is that, while income levels decreased, unemployment has caused the share of pensions to increase in total income. Since pension incomes are more equally distributed than wages, also this has been an income equalizing development, as Milanovic (1999) demonstrates. In Poland for instance, the pension-to-wage ratio rose from just over 50 % to just under 80 % between 1988-1989 and 1991-1992. During this time, Polish equality remained quite stable, with a Gini coefficient of .23-.24, even though incomes decreased substantially. In 1992-1993, the pension-to-wage ratio dropped to below 70 % (due to resumed growth and changed income policies), and inequality increased to Gini values of .29-.30 (Okrasa 1999). Since pension levels tend to be lower than wages, this was a reduction in inequality by downward income adjustment.

# **Poverty: The Evidence**

Most transition countries are middle-income or low-income countries, and falling incomes coupled with larger inequality during transition has resulted in larger absolute poverty rates. Overviews of poverty trends in the transition countries include Milanovic (1996, 1998) and World Bank (2000). Comparing poverty pre-transition and post-transition is difficult since poverty, like unemployment, did not officially exist during socialism. Yet the poverty incidence was plausibly already considerable given the low growth rates of socialist economies, the economic stagnation of the 1980s and the start of systemic disintegration during Gorbachev's Perestroika experiment from 1985 onwards. Quality of life indicators such as mortality, longevity and health deteriorated rapidly during *Perestroika* and the early transition years; Ellman (1994) reports that the crude death rate rose from 10.5 in 1987 to 14.6 in 1993. Commander et al (1999) find that the poverty rate based on a national consumption basket in Russia was already over 50 % in 1992. In this paper only poverty trends during transition itself will be considered, i.e. since 1989/1991. Table 1 presents recent poverty estimates for selected transition countries.

# Table 1: Poverty Rates in Selected Transition Countries

country	% Population below the national poverty line (survey year)	% population below \$1 per day	Poverty gap	% population below \$1 per day	Poverty gap
Central and Eastern Europe	2				
Czech Republic		<2 (1996)	< 0.5	<2 (1996)	< 0.5
Estonia	8.9 (1995)	<2 (1998)	< 0.5	5.2 (1998)	0.8
Hungary	8.6 (1993)	<2 (1998)	< 0.5	7.3 (1998)	1.7
Lithuania		<2 (1996)	< 0.5	7.8 (1996)	2.0
Slovakia		<2 (1992)	< 0.5	<2 (1992)	< 0.5
Slovenia		<2 (1998)	<0.5	<2 (1998)	<0.5
Balkan					
Albaniaª	23.1 (1994-6)	-	-		-
Bosnia/Herzegovina	-	-	-		-
Bulgaria	-	<2 (1997)	< 0.5	21.9	4.2
Croatia	-	<2 (1998)	< 0.5	<2 (1998)	< 0.5
FYR of Macedonia <sup>c</sup>	18.1 (1996)		-	-	-
Romania	21.5 (1994)	2.8 (1994)	0.8	27.5 (1994)	6.9
Slav Post-Soviet					
Belarus	41.9 (2000)	<2 (1998)	< 0.5	<2 (1998)	< 0.5
Russia	30.9 (1994)	7.1 (1998)	1.4	25.1 (1998)	8.7
Ukraine	31.7 (1995)	2.9 (1999)	0.6	31.0 (1999)	0.8
Trancaucasus & Central As	ia				
Armenia	-	7.8 (1996)	1.7	34.0 (1996)	11.3
Azerbaijan	68.1 (1995)	<2 (1995)	< 0.5	9.6 (1995)	2.3
Georgia	11.1 (1997)	<2 (1996)	< 0.5	9.6 (1996)	2.3
Kazakhstan	34.6 (1996)	<2 (1996)	< 0.5	15.3 (1996)	3.9
Kyrgyz Republic	51.0 (1997)	-	-	-	-
Moldova	23.3 (1997)	11.3 (1997)	3.0	38.4 (1997)	4.0
Fajikistan <sup>b</sup>	82.6 (1998)	16.9 (1998)	4.4	65.4 (1998)	22.9
Furkmenistan	-	12.1 (1998)	2.6	44.0	15.4
Jzbekistan	-	3.3 (1993)	0.5	26.5 (1993)	7.3

Source: World Bank ( 2000) unless otherwise indicated

Notes:

a. Avarage of urban (1996) and rural (1994) poverty rates, weighted by 2002 population shares (58 % rural, 42 % urban as in EBRD, 2003)

b. Source: Mills (2000). Poverty lines of \$ 1.075 and \$2.15 are used instead of \$1 and \$2.

c. Source: Scott (2001). The national poverty line is 60 % of median income.

While table 1 shows that poverty rates are substantial, this gives little idea of how poverty affects people in transition countries. This can be addressed in two ways: objectively, by employing a broader definition of poverty, such as the Human Development concept promoted by the UNDP; and subjectively, by listening to the 'voices of the poor'. UNDP (1999) presents an assessment of human development in transition countries. The report paints a sombre picture of declining life expectancy, rising infant and maternal mortality, migration, ageing and contracting populations. It also emphasizes social consequences of the transition which are not strictly material poverty, but which do contribute to declining well-being: increasing personal insecurity, more gender inequality, disillusion, a loss of communality, and - paradoxically in post-socialist countries - the lost freedom that economic hardship has implied.

Complementing this picture, five dimensions of poverty can be identified on the basis of findings from qualitative studies.

*Insufficient Food and Clothing.* Especially in the poorer transition countries, poverty is often found to be real destitution - the inability to satisfy basic needs. Extreme poverty, defined as food deficiency, affects 23 % of the population in Kyrgyzistan (Scott, 2001:ii). Nearly 30 % of respondents to a survey in Albania reported by De Soto *et al* (2002:102) say they do not have enough food to adequately feed members of their household.

*Bad housing quality and limited access to utilities.* The poor live in the worse housing conditions, with insufficient heating, little space, leaks, and other deficiencies. Access to utilities such as sewerage, gas, water, and electricity is also more restricted for the poor. In Kyrgizistan, 6 % of the poor have preferential access to electricity, compared to the 12 % national average (Scott, 2001)

*Health and healthcare.* Health indicators have worsened during the years of economic decline in the late 1908s and 1990s (Ellman, 1994; Zohoori et al, 1998). For instance, Ringold (2002) reports that in Bulgaria, the number of new tuberculosis cases per 100,000 population increased from 26 to 46 during 1990-1999 and maternal mortality per 100,000 live births from 21 to 24. Both increases are indicative of many other transition countries, and are faster than the increases in the rest of the world during the same years. In Lithuania, new tuberculosis cases increased from 40 to 63 in 1990-2000 (LSM, 2001). Access to health care became more restricted for the poor. Dudwick et al (2003) report that in Moldova people who were hospitalized had to provide everything necessary for their stay: bed linen, blankets, food, medicine, syringes, even blood for surgery. Patients had to pay doctors and nurses with food or cash just to look in on them. Dudwick et al (2003:341) report that poor families often

could not afford to complete treatment, sometimes not even to start it. Many diabetics could no longer afford their daily insulin. The physical presence of healthcare facilities is also generally worse for the poor. In Kyrgyzistan, only 29 % of the poor have access to a hospital, compared to 46 % for the non-poor (Scott, 2001).

*Psychological Effects* Because many households have relatively recently fallen into poverty and destitution, they are also inexperienced in developing coping strategies; and neither do they live in an environment where opportunities for such coping strategies have become incorporated into the fabric of economic life, as is the case in countries were poverty has been a long-standing phenomenon. The loss of well-being connected to increased poverty has also been especially large because it was too sudden. Ringold (2002) reports that the number of Bulgarians classifying themselves (subjectively) as poor was 73 % in 1997, compared to 26 % in 1989. In fact, objective measures for standard of living and poverty have actually improved since 1989, but it is the growing awareness of what was lost, and a longing for the recent, socialist past that decreased subjective well-being. Other studies also found a large loss of well-being subjectively measured (Ferrer-i-Carbonell and Van Praag, 2001).

In addition, socialist ideology had impressed a negative image of the poor on people's mind. Poverty was typically portrayed as the poor's unique failure to earn a living, and hence the poor were by definition undeserving. This image is still relevant to those who grew up under socialism. It also connects to the traditional, pre-socialist view in most of the Eastern European and Asian cultures, which links poverty with shameful failure to provide for family and guests. For these reasons, poverty brings a psychological burden of loss and of shame towards society in general and towards friends, neighbours and relatives in particular (Dudwick et al, 2003).

In response to the material, social and psychological effects of poverty, households developed a number of coping strategies by cutting expenses (using less utilities, changing diet, or combining households) and by generating cash and goods through networks of gift giving, multiple jobs, household food production, and (temporary) migration. Not all coping mechanism improve household survival prospects. A widespread method of relieving the burden of poverty is alcoholism, which is particularly rampant among men. Alcohol abuse and binge drinking are traditional social problems in the Eastern European and former Soviet countries, but they have become more acute during the late 1980s and 1990s (Ellman, 1994; Zohoori et al, 1998). Another coping method, also primarily for men, is household disintegration. Dudwick (2003) reports that its occurrence has dramatically increased during he 1990s mostly because of men leaving the household. The extreme example of destructive

coping mechanisms is suicide, also primarily by men. Each of these three 'coping mechanisms' typically increased women's livelihood burdens. The country with the world's highest suicide rate is Lithuania, the poorest of the EU accession countries. In 2000, Lithuania recorded 44 suicides per 100,000 inhabitants, up from 26 in 1990. Nine of the ten top suicide worldwide rates are found in transition countries (Lithuania, Russia, Belarus, Latvia, Estonia, Hungary, Slovenia, Ukraine and Kazakhstan). In these countries suicide rates per 100,000 inhabitants vary between 29 and 44, compared to 10 in the USA (LMS, 2001; Aneki, 2002).

#### **Vulnerable Groups**

#### Ethnic Minorities: the Roma

Many transition countries are ethnically heterogeneous. There are three causes: the creation of nation states and empires during the 19<sup>th</sup> century in the territories of different peoples in the region; forced or otherwise state-induced resettlements ('kulaks' in Siberia and Central Asia; Russians in the Baltic states); and the historic presence of stateless peoples, such as the Roma (or gypsies) and the Jews throughout the region, and the Ruthenians in Central Europe. The division of states into smaller successor countries, and partial remigration of some minorities (Crimean Tatars; Russians; Jews; ethnic Germans) during the transition period have decreased ethnic heterogeneity somewhat, but it is still considerable. Ethnic minorities do not always have higher poverty rates. For instance, ethnic Hungarians living in northern and central Romania are known to be better off economically than ethnic Romanians. But generally, ethnic minority members are more at poverty risk. The most numerous, best known, and also the one most vulnerable to poverty is the Roma minority.

Roma live in all countries in the region; their number in Europe is estimated at 7 to 9 million, with 70 % of them living in transition countries. They are most numerous in Romania, from 1 to 2 million. They account for 9 to 11 % of the population of the FYR of Macedonia, Romania, Bulgaria, and Slovakia, 5 % in Hungary, and 3 to 4 % in former Yugoslavia, the Czech Republic and Albania (Revenga *et al*, 2002). (Defining as well as observing Roma ethnicity is difficult for a number of reasons, and these figures are indicative rather than precise.)

There is abundant anecdotal evidence that Roma households have traditionally been among the poorest households in most countries in the region. Two recent survey studies complement this picture with quantitative analysis. A 2002 Roma Human Development Report by the UNDP, based on interviews with over 5,000 Roma individuals in Bulgaria, the Czech Republic, Hungary, Romania, and the Slovak Republic, assessed their situation and needs in the framework of the human development paradigm. In a 2002 World Bank Study, Revenga and others analysed a sample of over 4,000 households from Bulgaria, Hungary, and Romania, which included 1,139 Roma households. They provided a more extensive and thorough analysis. Although diversity in many household characteristics within the Roma community is very large, Roma households are found to be very different from non-Roma in a number of respects, as shown in table 2.

Households characteristics	Non-Roma	Roma
(means)		
Household size (persons)	2.8	4.4
Children (persons)	0.4	1.2
Living in urban area (%)	65	58
Female-headed households (%)	24	12
Household head age (years)	50	40
Working adults (persons)	0.9	0.6
Employed household heads (%)	43	25
Unemployed household heads (%)	10	43
Out-of-labourforce household heads (%)	47	32
No primary education completed (%)	13	41
Completed primary education (%)	18	36
Some secondary education (%)	55	23
Some higher education (%)	14	0

Table 2: Households characteristics of Roma and non-Roma

Many of these specific Roma characteristics are among the causes of, or correlates with poverty. Revenga *et al* (2002) found that Roma live in worse conditions. Compared to non-Roma, fewer of them have access to electricity, gas and running water, and many live in houses without toilets, bathrooms,

connection to sewerage, or telephones. Roma houses much more often have leaky roofs, wet walls, earthen floors, and no beds. Beyond the household level, there is additionally social exclusion through both discrimination by the non-Roma majority and through geographical isolation from non-Roma society - many Roma household live in Roma-only rural settlements, or in exclusively Roma neighborhoods within towns and cities. Against this background, it is not surprising that Roma are extremely vulnerable to poverty. Indeed, poverty rates among Roma in the Revenga *et al* (2002) sample are multiples of poverty rates among non-Roma (table 3). Much of this is plausibly long-term poverty, as confirmed by Braithwaite (2001) for Hungarian Roma.

Table 3: Poverty rates of Roma and non-Roma in Bulgaria, Hungary, and Romania

% of households in poverty					
Bulgaria		Hungary		Romania	
Roma	others	Roma	others	Roma	others
36.1	3.8	24.5	4.5	39.5	10.9
37.2	3.4	26.3	3.6	43.1	11.1
41.4	4.1	6.6	0.5	37.6	7.3
80.1	36.8	40.3	6.9	68.8	29.5
	Roma 36.1 37.2 41.4	Bulgaria   Roma others   36.1 3.8   37.2 3.4   41.4 4.1	Bulgaria Hut   Roma others Roma   36.1 3.8 24.5   37.2 3.4 26.3   41.4 4.1 6.6	Bulgaria Hungary   Roma others Roma others   36.1 3.8 24.5 4.5   37.2 3.4 26.3 3.6   41.4 4.1 6.6 0.5	Bulgaria Hungary Ron   Roma others Roma others Roma   36.1 3.8 24.5 4.5 39.5   37.2 3.4 26.3 3.6 43.1   41.4 4.1 6.6 0.5 37.6

Note: In the source there are 'PPP 2.15 per capita' and 'PPP 4.30 per capita' poverty lines. We assume this is expenditures per day.

Source: Revenga et al (2002:13)

#### Women

Women in many socialist countries had high labor force participation rates, paid wage levels similar to those of men, and families had generally access to free healthcare and childcare. This situation of economic participation and relative independence has seriously deteriorated in most countries. Childcare has been privatized and became unattainable for many households. Job insecurity affects especially pregnant women or those with children, who are vulnerable to layoffs. The household has become a more unstable unit, and break ups often mean that women are left with the double burden of care and income generation. The spread of alcoholism, mainly among men, also meant that both burdens have landed on women's shoulders even in intact families. The collapse of state-provided childcare and healthcare induces households to rely more on traditional provision within the family, which often imply more traditional roles for women, with less economic independence and social contacts outside the family. Particularly in Central Asian countries where Islam has grown in importance, this has caused women's roles to become more centred around care and provision for other family members. Dudwick *et al* (2003:69) report that women in Tajikistan now constitute the main workforce in collective farms and are paid miserable wages, while men have become hired laborers on others' land or worked elsewhere in the former Soviet Union. Elderly women have especiallay grown more vulnerable to deprivation.

As an illustration, Dudwick *et al* (2003:267) reports about Ukrainian Olga Vadimovna, 31, who has two sons, 11 and 9. Her ex-husband is an alcoholic and provides no child support. When her eldest son was 6, she sent him to an *internat*, a government-run boarding school because she could not afford to raise him. The younger son tells the interviewer "I, too, want to go to the *internat*. There they eat four times a day. My mother has started to drink lately. She washes or repairs things for people, gets some money, and drinks. There is not enough money for food."

# Single Elderly People

With the decline in the real value of pensions, elderly people have suffered a reduction in their main (and often sole) source of income. Their more limited capacity for adaptation to the drastic changes as well as their physical frailty, are often barriers for effectively coping with economic hardship. Braithwaite (2001) found that pensioners are more at risk from chronic poverty. Interestingly, it is only *single* elderly people who are found to be more at risk from poverty. Bezemer and Lerman (2003) find that having a pensioner in the household does not increase, or even reduces the risk of poverty in Armenia, a finding corroborated by Benerji (1999) and Ringold (2002) for Moldova, Russia, Ukraine and Bulgaria. Also in a poverty assessment of Azerbaijan, O'Keefe and Holson (1997) find that household with pensioners have the lowest rates of poverty; lower than those headed by a working-age employed. In such countries, with little alternative income options, pensioners are actually advantaged. Ringold (2002) reports that transfers keep many pensioners above the poverty line in Bulgaria. Banerji (1999) suggest that pensioners' larger asset accumulation during Soviet times may be one reason of their decreased vulnerability. But in all countries, elderly people living on their own are more than averagely vulnerable.

Dudwick *et al* (2003:123) write that Armenians in rural and urban communities insisted they would 'never let anyone starve'. Nevertheless, in their fieldwork they found that elderly pensioners with adult children or close relatives in other towns often received little help from neighbours, who felt that pensioners were the moral responsibility of their own children. Some elderly people said they preferred to die rather than receive help from indifferent relatives.

# Children

Like everywhere, large families in transition countries are more at risk from poverty so children are more often poor; but there are large country differences. Bradbury et al (2000) found that median expenditure for children in the mid 1990s was 14 % lower than the average; in Hungary they have 3 % lower income. O'Keefe and Holson (1997:5) report that 'very poor', 'poor' and 'nonpoor' household in Azerbaijan have on average 2.1, 1.9, and 1.1 children, respectively. Bulgarian households with 5 or more members make up 30 % of the population, but 60 % of the poor (Ringgold, 2002). Of all Moldovans, 18 % are found to be poor in a 1997 survey, but of all Moldovans living in families with 3 or more children, 42 % are poor (Banerji, 1999:xv). The relation between household size and poverty risk depends largely on the number of children; as we have seen, the presence of elderly people in an extended household may actually decrease that risk. Children have also suffered from decreased access to education. Ringold (2002) reports that attendance rates in Bulgarian pre-school and secondary education have sharply fallen during 1995-2000, particularly among minority Turks and Roma. Secondary school attendance of children in households in the lowest 20 % consumption quintile is 15 %, compared to 50 % for other households. De Soto et al (2002:60) report that both attendance and literacy in Albania has declined; in two surveyed districts, only 20-30 % of eight grade children go on to secondary education. Girls are more affected than boys. Reasons for declining attendance include temporary migration, child labor, physical and social insecurity, and the cost of education.

#### Households at Vulnerable Locations

In many cases, household vulnerability to poverty is largely caused by the location of their residence. Two types of locations stand out in this respect. First, remote rural regions are, as elsewhere, typically endowed with infrastructure, social services, and employment opportunities, while households living in them are often older, less educated and less mobile than the rest of the population. Second, and especially for transition countries, there are settlements where most households relied for their livelihoods on employment in one sector or enterprise, as a result of the tendency towards regional specialization and large-scale production under the socialist system. The extreme example is the 'one-company town' (or village), where many former employees of now unprofitable enterprises such as arms factories (concentrated e.g. in eastern Slovakia) or collective farms tend to be concentrated. The poverty risk in eastern Slovakia is 16 %, compared to 11-12 % in Central and West Slovakia, excluding the capital Bratislava (Revenga and Silva-Jauregui, 2001). One third of Bulgarians live in rural areas, but 60 % of the poor are rural. Rural poverty rates are four times urban poverty rates (Ringold, 2002). Regional differences are particularly sharp in countries were smaller scale or diversified production was lacking, where private employment opportunities have hardly developed, as in most Central Asian countries, or where local conflict erupted. Poverty rates in the O'Keefe and Holson (1997:5) study on Azerbaijan vary between 11-12 % in three regions in the southwest, north and northwest, to 31 % and 35 % in two central Azeri regions. The extreme example of households at vulnerable locations is refugees - in Kosovo, Azerbaijan, Georgia, Chechnya, and other transition countries. (Severe) poverty based on a consumption basket among Azeri IDPs in 1995 was 50 % and 75 %, respectively, compared to 20 % and 60 % on average in Azerbaijan (O'Keefe and Holson, 1997:I).

# **Duration of Poverty**

There is little data on the duration of poverty in transition countries. For most countries it is unknown whether many households are poor for a limited duration or fewer households poor for longer periods of time. Yet chronic poverty is known to be generally more difficult to reduce, and it typically requires different policies. The paucity of reliable time series data stems from volatility in income levels and structures - which may invalidate definitions of poverty used only recently - and from discontinuities in data collection methods

and organizations: many countries switched from census to sampling methods, and monitoring was often taken over from state bodies by private organizations.

Where poverty is causally related to a permanent household feature (such as ethnicity), chronic poverty can be reliably inferred without time series data. For instance, most Roma households are found to be among the poorest in different studies over time, and it is plausible that most poor Roma households are chronically poor. Still, such inferences are on the group level not on the household level, and there are large variations in income and wealth within Roma communities. For some countries there is time series poverty data. In this research, two quantitative chronic poverty studies are presented.

# Chronic Poverty in Hungary, 1992-1997

A 2001 World Bank report by Braithwaite and others analyzed long-term poverty in Hungary during 1992-1997, based on panel data of 20,000 households. Long-term poverty was defined as being in poverty for four years or more. The authors note that poverty and inequality are low in Hungary compared to other transition economies. Per capita incomes fell by a quarter, the share of earned income in total income fell from 84 % to 72 %, the Gini coefficient rose from .28 to .32, and the headcount poverty rate (based on a poverty line equal to a subsistence minimum income of about half the mean equivalent income) rose from 9.7 % to 17.3 % during 1992-1997. Absolute poverty defined by a poverty line equal to the minimum pension (which was less than a third of mean equivalent income) was very low, topping at 4.5 % in 1996. Poverty, while lower, seems more entrenched than in other countries, as persistent poverty is identified as a particular Hungarian concern. Poverty is concentrated among the poorly educated, those living in remote rural areas, those in a weak labor market position, and Roma.

The long-term poor are identified using a poverty line of 50 % of mean equivalent income (income is preferred since consumption appear often over-reported). So defined, seven and a half percent of the Hungarian population were considered long-term poor during 1992-1997. This figure is based on household data, and thus omits the homeless and the institutionalized. Both of these groups, while small (there are 20,000 to 30,000 homeless on Hungary's 10 million inhabitants) are likely to have large percentages of chronically poor.

Chronic poverty risk factors are found to be the same as those making households more vulnerable to poverty in general. They are, specifically, Roma households, single-parent households, single elderly women, households headed by someone with only primary education, households with disabled members, those with three or more children, and household in small rural communities. It is because of these factors that the chronically poor stay poor: three quarters of them are out of the workforce; they often live in low-growth areas and in places where poverty reduction policies and access to information are less effective; a third of them face discrimination and social exclusion.

These inferences are supported by some figures from the study by Braithwaite (2001). He found that ethnicity is the most important chronic poverty factor: one third of the chronically poor are Roma (who account for only 4-5 % of the population), and 53 % of the Roma are long-term poor. Only about 5 % of Hungarians live in single-parent households, but they accounted for 12 % of long-term poor in the sample. While households with pensioners are less at risk of poverty, single elderly people are; women 19 times more than men. Among households headed by someone with higher education, 96 were never poor and the remaining 4 % were poor only once or twice during the period under study. In contrast, households headed by someone with only primary education (which account for 32 of households) have a risk of 19 % of long term poverty. Households without children have a long-term poverty rate of 4 %; those with one child have a rate of 9 % and among those with three or more children, 21 % are chronically poor. A quarter of Hungarian household have two children, and 14 % have three or more.

To disentangle the effect of the various factors lading to long-term poverty, Braithwaithe et al (2001) performed a probit regression analysis, where household characteristics were related to the probability of being chronically poor, controlling for other variables. Table 4 presents the results.

Household characteristics	Change in the probability of being poor (%)			
Pensioners	+ 2.6			
Unemployed	+ 7.2			
Single parents with child(ren)	+ 2.9			
Other household with child(ren)	+ 2.1			
Households with 3 or more children	- 0.7			
Single elderly male	- 0.5			
Single elderly female	+ 1.1			
Female household head	+ 1.5			
Access to land	- 1.4			
Primary education completed	+ 0.9			
Secondary education completed	- 1.7			
Higher education completed	- 1.0			
Roma ethnicity	+ 12.6			

# Table 4: household characteristics and the risk of chronic poverty in Hungary

Note: the regression included other variables in addition to the ones presented here.

For regression details and statistics, coefficients and P values, see source.

Source: Braithwaithe et al (2001:20)

The table shows that unemployment and Roma ethnicity are the greatest risk factors, followed by being pensioners and single parents. Secondary education and access to land are most effective in diminishing the risk of chronic poverty.

#### Chronic Poverty in Russia, 1992-1996

Commander et al (1999) study income and wealth dynamics in Russia during the years 1992-6, using data from the Russian Longitudinal Monitoring Survey.

This consist of seven survey rounds, implemented at regular intervals during 1992-1996, and including data on between 4,700 and 7,200 households in between 21 and 38 regions of the Russian Federation (see Zohoori *et al*, 1998 for details on these data). Defining poverty on a consumption basis, using a basket of goods defined by the official statistical bureau Goskomstat, and assuming no economies of household size, the authors find that roughly half the population fell below the poverty line by mid-1992. An income-based poverty line gives the same share. The figures fall to 35 % in 1996 for consumption-based poverty, or 45 % using an income based poverty line.

The authors then examine the chronically poor, which they define as households who were in poverty during all of the survey rounds over a period. Because of data consistency problems, they could not compare households over the entire 1992-1996 period. In the first four survey rounds during 1992-1993, 10 % of households were chronically poor, 67 % fell into transient poverty during one period only, and 23 % were never poor. In survey rounds 5 to 7, during 1994-1996, the respective figures are 9 %, 46 %, and 45 %. So while both poverty and transient poverty fell considerably, chronic poverty did not.

Commander et al (1999) also analyzed the probability of a households being chronically poor in 1992-1993 using a probit regression. The statistically significant risk factors (with the change in poverty risk in brackets) are divided into three categories: location, human capital, and asset wealth. Households with higher dependency ratios are more likely to be poor (0.768). Risk reducing factors include rural residence (-0.171), residence in industrial areas (-0.089) or in one of Russia's two largest cities, Moscow and St Petersburg (-0.143). Also diminishing the risk of poverty are a white-collar or blue-collar job held by the head of households (-1.285 and -0.975, respectively) and completed secondary education (-0.331), as do access to land (-0.165) and *dacha* ownership (-1.026).

We noticed that the relatively low risk change connected to land ownership is probably due not so much to its small importance to staying out of poverty - an unlikely interpretation-, but more likely to the small variation in the variable: most Russian households have access to a plot of land (in 1994-6, 69 % reported to do so in the RLMS). It is also interesting to note that the share of pensioners among the chronically poor is slightly lower (24 %) than the equivalent share in the total population (29 %, both in 1994-1996), and house ownership actually higher (34 % compared to 28 %), although neither of these differences were statistically significant in influencing the poverty risk in the selected specification. For regression details and statistics, see Commander *et al* (1999:446).

## Conclusion

This paper examined poverty in transition countries in Central and Eastern Europe, the Balkan and former Soviet Union. It sketched the economic background to the transition, and presented quantitative and qualitative evidence on the incidence, severity and nature of poverty on the basis of a large body of research on the subject. The main facts can be summarized as follows.

Well-being, measured in various ways, decreased substantially in the Soviet Union and in some Balkan countries (Romania, Albania) already in the late 1980s. Thus, poverty in these countries is not just a 'transition' phenomenon.

During transition, unemployment, inflation and state desertion have increased people's vulnerability to poverty. Consequently, poverty levels have also in many countries been high after the collapse of socialism, despite expectations of the opposite at the outset of the transition era. In Central and Eastern Europe, which were relatively wealthy and egalitarian socialist societies, inequality and poverty increased substantially as a result of systemic economic change. It is severe in regional pockets such as Eastern Slovakia and remains a challenge even in advanced market economies and EU members, which have benefited from years of assistance in transforming their economies through programs such as EU PHARE.

Poverty levels differ tremendously across transition countries, reflecting the divergence in economic success. Some Central European countries show very little and relatively mild poverty, while especially in Central Asia, levels of severe poverty leading to insufficient caloric intake seem high.

Qualitative studies indicate that poverty is associated with insufficient food and clothing, poor housing, limited access to utilities, poorer health and less access to healthcare, social exclusion, and psychological suffering. Coping strategies include household food production, resource pooling, multiple job holding, migration, dietary and other consumption changes, as well as household disintegration, alcoholism and suicide. Particularly vulnerable to poverty are households in remote rural areas, children, women, and single elderly people.

Transition economies have been volatile and many people move in and out of poverty. While data on long-term poverty is scarce, selected studies from Russia and Hungary indicate that there also is a core of long-term poor, for whom escaping poverty is apparently not possible. These deserve separate policy attention.

#### References

Ackrill, R (2002) Social Security, Poverty and Economic Transition: An Analysis for Bulgaria 1992-96. *Economics of Planning* 35 (1), pp 19-46.

Aneki (2003) Global Facts, at http://www.aneki.com.

Bezemer, D (2002) Russian Reforms: the Return of the Peasant? In A. Tavidze (ed.): *Progress in Economic Research*. New York: NovaScience Publishers.

Bezemer, D and Z Lerman (2003) Rural Livelihoods in Armenia. *Hebrew University at Jerusalem Working Paper 403* at

http://departments.agri.huji.ac.il/economics/lerman-armenia.pdf .

Bradbury, B., S. Jenkins and J. Micklewirght (2000) *Child Poverty Dynamics in Seven Nations* Innocenti Working Paper no. 78. Florence: UNICEF Innocenti Research Centre.

Braithwaite, J (2002) *Hungary: Long-Term Poverty, Social Protection, and the Labor Market.* Volume I: Main Report. Report no. 20645-HU. Poverty Reduction and Economic Management Unit, Europe and Central Asia Region. Washington, D.C.: World Bank.

Commander, S, A. Tolstopiatenko and R Yemtsov (1999) Channels of Redistribution: Inequality and Poverty in the Russian Transition. *Economics of Transition* 7 (2) pp 411-47.

De Soto, H, P. Gordon, I. Gedeshi, and Z.Siniomeri (2002) *Poverty in Albania. A Qualitative Assessment.* World Bank Technical Paper 520. Washington, D.C.: World Bank.

Dudwick, N., E. Gomarth, M. Alexandre & K. Keuhnast (eds) (2003), When Things Fall Apart: Qualitative Studies of Poverty in the Former Soviet Union. Washington, World Bank..

EBRD (2002) *Transition Report 2002: Update*. London: European Bank for Reconstruction and Development.

EBRD (2003) *Transition Report 2003*. London: European Bank for Reconstruction and Development.

Ellman, M (1979) *Socialist Planning*. Series Modern Cambridge Economics. Cambridge, UK: Cambridge University Press.

Ellman, M (1994) the Increase in Death and Disease Under 'Katastroika' *Cambridge Journal of Economics* 18(4) pp. 329-355.

Ferreira, F (1999) Economic Transition and the Distributions of Income and Wealth. *Economics of Transition*. 7 (2) pp 377-410.

Ferrer-i-Carbonell, A and B Van Praag (2001) Poverty in Russia. *Journal of Happiness Studies* 2 (2). pp 147-72.

Kakwani, N (1996) Income Inequality, Welfare and Poverty in Ukraine. *Development & Change*. 27 (4) pp 663-91.

Kandiyoti, D. (1999) Poverty in Transition: An Ethnographic Critique of Household Surveys in Post-Soviet Central Asia. *Development & Change* 30 (3). pp 499-524.

Klugman, J (ed.) *Poverty in Russia: Public policy and Private Responses.* Economic Development Institute (EDI) Development Studies. Washington, D.C.: World Bank.

Klugman, J and J Braithwaite (1998) Poverty in Russia during the Transition: An Overview. *World Bank Research Observer13* (1) pp 37-58.

LMS (2001) *Statistical Yearbook Lithuania 2001*. Vilnius: Lietuvos Statistikos Metrastis (Lithuanian Statistical Bureau).

Lokshin, M, .K Harris, and B Popkin (2000) Single Mothers in Russia: Household Strategies for Coping with Poverty. World Development 28..

Lokshin, M. and B. Popkin (1999) The Emerging Underclass in the Russian Federation: Income Dynamics 1992-96 *Economic Development and Cultural Change* 47, pp 803-29.

Milanovic, B (1996) Income, Inequality and Poverty during the Transition: A Survey of the Evidence. *MOCT-MOST: Economic Policy in Transitional Economics* 6 (1). pp 131-47.

Milanovic, B. (1998) Income, Inequality, and Poverty during the Transition from Planned to Market Economy. Washington: World Bank.

Mills, M (2000) Republic of Takjikistan Poverty Assessment. Report no. 20285-TJ. Human Development Sector Unit. Europe and Central Asia Region. Washington, D.C.: World Bank.

Mroz, T. and B.Popkin (1995) Poverty and the Economic Transition in the Russian Federation. *Economic Development and Cultural Change* 44, pp 1-31.

Mroz, T., L. Henderson, and B Popkin (2001). *Monitoring Economic Conditions in the Russian Federation: The Russia Longitudinal Monitoring Survey 1992-2000*. Report submitted to the U.S. Agency for International Development. Carolina Population Center, University of North Carolina at Chapel Hill, North Carolina.

Nove, A. (1987) The Soviet Economic System. London: Allen and Unwin.

ODI (2003) 'Experiences of PRSPs in transition countries'. At http://www.prspsynthesis.org/.

O'Keefe, P. and J.Holson (1997) *Azerbaijan: Poverty Assessment*. Report no. 15602-AZ. Poverty Reduction and Economic Management Unit, Europe and Central Asia Region. Washington, D.C.: World BanK. Pomfret, R and K. Anderson, Kathryn H. Poverty in Kyrgyzstan. *Asia-Pacific Development Journal* 6 (1). pp 73-91.

Rashid et al (1999) Former Republic of Yugoslavia: Focusing on the Poor. Report no. 19411-MK. HumanDevelopment Sector Unit, Country Department IV, Europe and Central Asia Region. Washington, D.C.: World Bank.

Revenga, A and C. Silva-Jauregui (2001) *Slovak Living Standards, Employment and Labour Market Survey*. Report 22351-SK, Human Resource Division, Country Depart, ment III, Europe and Central Asia Region. Washington, D.C.: World Bank.

Revenga, A., D. Ringold and W. Tracy (2002) *Poverty and Ethnicity - A Cross-Country Study of Roma Poverty in Central Europe*. Washington, DC: World Bank.

Ringold (2002) *Bulgaria Poverty Assessment*. Report 24516-BUL, Human Development Department, Europe and Central Asia Region. Washington, D.C.: World Bank.

Scott, W (1997) Poverty in Transition in Eastern Europe and the Commonwealth of Independent States: Conceptual Issues and Some Findings. *Statistical Journal of the United Nations Economic Commission for Europe* 14 (2) pp 189-208.

Scott, K (2001) *Poverty in the 1990s in the Kyrgyz Republic*. Report 21721-KG, Human Development Department, Country Department VIII, Europe and Central Asia Region. Washington, D.C.: World Bank.

UNDP (1999) *Human Development Transition Report*. Bratislava: United Nation Development Programme, Regional Bureau for Europe and the CIS.

UNDP (2002) *The Roma in Central and Eastern Europe: Avoiding the Dependency Trap.* Bratislava: United Nation Development Programme, Regional Bureau for Europe and the CIS.

World Bank (2000) Making transition work for everyone: Poverty and inequality in Europe and Central Asia. Washington, D.C.: World Bank.

Zohoori, N., P. Kozyreva, M. Kosolapov, M. Swafford, B. Popkin, E. Glinskaya, M. Lokshin, and D. Mancini (1998) Monitoring the Economic Transition in the Russian Federation and its Implications for the Demographic Crisis--the Russian Longitudinal Monitoring Survey. *World Development* 26(11), pp 1977-1993.