Income Distribution and Poverty in Russia

Irina Denisova

OECD

Unclassified

DELSA/ELSA/WD/SEM(2012)3

DIRECTORATE FOR EMPLOYMENT, LABOUR AND SOCIAL AFFAIRS
EMPLOYMENT, LABOUR AND SOCIAL AFFAIRS COMMITTEE

OECD SOCIAL, EMPLOYMENT AND MIGRATION WORKING PAPERS NO. 132

Income Distribution and Poverty in Russia

by Irina Denisova

All Social, Employment and Migration Working Papers are now available through OECD's Internet website at http://www.oecd.org/els

JT03318700

DIRECTORATE FOR EMPLOYMENT, LABOUR AND SOCIAL AFFAIRS

www.oecd.org/els

OECD SOCIAL, EMPLOYMENT AND MIGRATION WORKING PAPERS

www.oecd.org/els/workingpapers

This series is designed to make available to a wider readership selected labour market, social policy and migration studies prepared for use within the OECD. Authorship is usually collective, but principal writers are named. The papers are generally available only in their original language – English or French – with a summary in the other.

Comment on the series is welcome, and should be sent to the Directorate for Employment, Labour and Social Affairs, 2, rue André-Pascal, 75775 PARIS CEDEX 16, France.

The opinions expressed and arguments employed here are the responsibility of the author(s) and do not necessarily reflect those of the OECD.

ACKNOWLEDGMENT

Abstract

ABSTRACT

The paper is a survey of literature and statistical sources on poverty and inequality in Russia in the 1990s and the 2000s. It serves as a background to OECD (2011), the OECD Labour Market and Social Policy Review of the Russian Federation that was released in 2011. We start with an overview of poverty and income inequality estimates available. Poverty and inequality trends are then complemented with poverty incidence analysis based on a nationally representative household survey. Long-term poverty patterns are examined using a panel dataset with survival analysis methods. Poverty prevention and reduction policies are discussed in the conclusion.

Keywords: poverty, inequality, poverty incidence, entry to and exit from poverty, RLMS-HSE

JEL Codes: I32

RESUME

Ce document fait le tour des sources statistiques et bibliographiques sur la pauvreté et les inégalités dans la Fédération de Russie dans les années 90 et 2000. Il a servi à l'élaboration de l'Etude publiée en 2011 par l'OCDE intitulée « OECD Reviews of Labour Market and Social Policy : Russian Federation ». Ce document débute par un examen des données disponibles sur la pauvreté et les inégalités de revenus. Les tendances en matière de pauvreté et d'inégalité sont ensuites complétées par des analyses qui s'appuient sur des enquêtes nationales représentatives des ménages. Les motifs de la pauvreté à long terme sont étudiés en utilisant un échantillon de données avec des méthodes d'analyse de survie. Les politiques de prévention et de réduction de la pauvreté sont présentées en conclusion.

Mots clés : pauvreté, inégalité, incidence de la pauvreté, entrée et sortie de la pauvreté, RLMS-HSE.

JEL Codes: I32

The OECD Council decided to open accession discussions with the Russian Federation on 16 May 2007, and an Accession Roadmap, setting out the terms, conditions, and process for accession was adopted on 30 November 2007. Accession discussions are currently ongoing. The OECD Employment, Labour and Social Affairs Committee was requested to review the Russian Federation in its field of competence and, as part of this process, prepared the OECD Review of Labour Market and Social Policies of the Russian Federation, which was released in December 2011 (www.oecd.org/els/Russia2011).

This publication covered a wide range of issues including: addressing poverty and income inequality; the role of wages in labour market adjustment; improving enforcement of labour laws; investing more in effective ALMPs; rebalancing benefits to support the working age population and their children; raising pensionable ages; and generally ensuring the financial sustainability of the pension system.

The present working paper was commissioned from Irina Denisova, a consultant to the OECD Secretariat, in order to provide background information for the OECD Review, but is not part of it. The views expressed in this paper cannot be attributed to the OECD or its Members; they are the responsibility of the author alone.

Le Conseil de l'OCDE a décidé d'ouvrir des discussions avec la Fédération de Russie le 16 mai 2007 et une feuille de route sur son accession, adoptée le 30 novembre 2007, définit les modalités, les conditions et le processus devant permettre à la Fédération de Russie d'adhérer à l'OCDE. Les discussions sur l'accession sont toujours en cours. Dans le cadre de ce processus, le Comité de l'emploi, du travail et des affaires sociales de l'OCDE a été mandaté pour passer en revue le marché du travail et les politiques sociales de la Fédération de Russie, et dans le cadre de ce processus, a préparé « The OECD Reviews of Labour Market and Social Policy of the Russian Federation » qui a été publié (en anglais seulement) en décembre 2011 (*www.oecd.org/els/Russia2011*).

Cette publication couvre tout un ensemble de questions, notamment : la lutte contre la pauvreté et les inégalités des revenus, le rôle des salaires dans l'ajustement du marché du travail, l'amélioration de l'application des lois sur le travail, le plus grand investissement dans des PAMT efficaces, le rééquilibrage des prestations pour soutenir les personnes actives et leurs enfants ; le relèvement de l'âge ouvrant droit à la retraite ; et plus généralement, la façon d'assurer la viabilité financière du système de retraite.

Irina Denisova, consultante au Secrétariat de l'OCDE, a été chargée de la préparation de ce rapport en vue de fournir les informations de base nécessaire à l'examen de l'OCDE, dont il ne fait pas toutefois partie intégrante. Les points de vue exprimés dans ce document ne peuvent être attribués à l'OCDE ou à ses pays membres et ne relèvent que de la responsabilité de l'auteur.

TABLE OF CONTENTS

Tables

Figures

INCOME DISTRIBUTION AND POVERTY IN RUSSIA

Moscow, 2012

1. Overview of poverty and income inequality estimates available for Russia. Methodology and data sets utilised.

1.   Long-term sustainability requires social stability, which could be undermined by high levels of income inequality and poverty. Inequality in Russia has stayed high throughout the transition period, and even slightly increased since the beginning of the Millennium, according to measures of the Russian statistical agency (Rosstat). The Gini inequality index rose from 0.397 in 2001 to 0.422 in 2009, and the ratio of the average incomes of the highest decile to those of the lowest decile increased from 13.9 to 16.7 during this same period (Table 1). This huge income gap comes mainly from the gap between incomes of the top decile and all other incomes: the top decile is estimated to get thirty percent of the total monetary income in the economy.

2.   Earnings inequality is higher than income inequality for all the years in the period except 2009. The ratio of the highest to the lowest decile based on wages was estimated at 25.3 in 2006, decreased to 22.1 in 2007 and further to 14.7 in 2009, and increased again to 16.1 in 2011 (Table 1 and Rosstat, *Trud i Zanyatost* 2011, p.433 for 2011). The Gini coefficient declined from 0.459 in 2006 to 0.447 in 2007 and further to 0.418 in 2009, and increased again to 0.425 in 2011 (Table 1 and Rosstat, *Trud i Zanyatost* 2011, p.425 for 2011). Thus, except for 2009, income inequality is lower than earnings inequality, pointing to the fact that inequalities originating in the labour market are reduced by redistribution to a significant degree, either directly (via transfers) or implicitly (via subsidies), formally (via public transfers) or informally (via support from relatives).[1] The picture in 2009 is likely to reflect an active phase of labor market adjustment to the crisis with sizeable wage compression.

---

[1] Measurement errors cannot be ruled out, however.

Table 1. Income inequality measures

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total monetary income	100	100	100	100	100	100	100	100	100
Including									
1st quintile (lowest)	5.7	5.7	5.5	5.4	5.4	5.3	5.1	5.1	5.1
2nd	10.4	10.4	10.3	10.1	10.1	9.9	9.7	9.8	9.8
3rd	15.4	15.4	15.3	15.1	15.1	14.9	14.8	14.8	14.8
4th	22.8	22.7	22.7	22.7	22.7	22.6	22.5	22.5	22.5
5th quintile (highest)	45.7	45.8	46.2	46.7	46.7	47.3	47.9	47.8	47.8
including 10% highest	29.2	29.3	29.7	30.1	30.1	30.6	31.1	31.1	31
Gini	0.397	0.397	0.403	0.409	0.409	0.416	0.423	0.422	0.422
Ratio of average incomes of highest decile to lowest (D10/D1 ratio)	13.9	14	14.5	15.2	15.2	16	16.8	16.8	16.7
Ratio of lowest income of highest decile to highest income of lowest decile (D9/D2 ratio)	6.5	6.6	6.7	7	7	7.2	7.5	7.5	7.5
Wage Gini				0.467	0.456	0.459	0.447		0.418
Ratio of average wage of highest wage decile to lowest wage decile (D10/D1 ratio)				26.4	24.9	25.3	22.1		14.7

Source: Socialnoe polozhenie i uroven zhizni naseleniya Rossii, Rosstat (2010), p. 133 for income and Trud i Zanyatost, Rosstat (2007), p. 411 , Trud i Zanyatost (2009), p.411 for wages.

Note: Income is defined as per-capita disposable monetary income. Wage inequality measures are based on biannual surveys of forms and organizations on wages. Wage includes monthly equivalent of quarterly bonuses but excludes annual bonuses and other one–time payments.

3.   Since the beginning of the 2000s, poverty as measured against absolute regional poverty lines declined almost twofold, from 27.5% of the population in 2001 to 13.2% in 2009 (Table 2). Nevertheless, more than 18 million people still have below-subsistence incomes. The poverty rate is estimated to be higher among children (19.8% in 2009). Pensioners are relatively better-off, with a poverty rate of 7.7% *(Socialnoe polozhenie i uroven zhizni naseleniya Rossii,* 2010, p. 140).

Table 2. Poverty measures (absolute poverty, Rosstat)

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Population with income below subsistence level									
mn people	40	35.6	29.3	25.2	25.2	21.5	18.7	18.9	18.5
% of population	27.5	24.6	20.3	17.6	17.7	15.2	13.3	13.4	13.2
Poverty gap									
bn Rbs	238.6	250.5	235.4	225.6	285.5	276.6	270.3	325.3	357.7
% of total population income	4.5	3.7	2.6	2.1	2.1	1.6	1.3	1.3	1.3

Source: Socialnoe polozhenie i uroven zhizni naseleniya Rossii, Rosstat (2010), p. 139.

Note: The subsistence basket was changed in 2005.

4.   To be effective, policies to fight poverty need to be based on a clear understanding of its determinants. There is a significant body of literature on poverty in Russia. Table A1 in the Appendix summarises the key results of the selected studies on poverty in Russia from 1999 to 2007, paying special attention to the data used and the methodology applied.

5.   Several points can be made regarding what is known about poverty in Russia. First, poverty rates are of a significant magnitude and vary with the measure used. However, the poverty gap is not large. Second, with regard to poverty dynamics, the majority of the poor are transitory poor, with large flows into and out of poverty. This is consistent with the observation that the poverty gap is small for the majority of families. A large share of families living near the poverty line, together with a reported lack of opportunities to smooth consumption, make Russian households vulnerable to shocks. Third, based on observable demographic and economic characteristics, there is no significant distinction between the factors determining transitory poverty and those determining chronic poverty. Put differently, all the studies agree that the same factors determine both chronic and transient poverty and/or that the magnitude of influence of these factors is very similar. Fourth, the following categories can be identified as vulnerable: large families; single parents and, more broadly, families with children; rural households; families with heads who are unemployed or were owed wage arrears (of which there were many in the 1990s). Pensioners are found to be relatively well buffered from poverty. A better education, especially a university degree, is also an effective buffer against poverty, especially in urban areas.

6.   In what follows, we update the results on income inequality and poverty in Russia for the latest period (up to 2009). The aggregate picture is based on Rosstat aggregate measures where available, together with calculations using publicly available data sources. Analysis of the determinants of the incidence and duration of poverty is based on micro level data. Before we proceed, it is important to describe the available data sources on Russian households.

7.   The main source of data on Russian households is the quarterly household budget survey run by Rosstat. The rotating nationally representative sample comprises 50 000 households. The data contains detailed information on expenditures and transfers (via diary collection). The survey is the basis for aggregate expenditure statistics for poverty and for income inequality estimates. Some micro data are now publicly available (2003-2009). The raw data are modified in a complicated and non-transparent way to adjust for possible sampling and non-response biases. The main adjustment tool used is the approximation of a lognormal distribution, by estimating its parameters on the sample micro-data based on the assumption that the average household income is equal to that estimated from the balance of monetary incomes and expenditures (see the next paragraph). As a result, the published aggregate data on income distribution are based on the modified original consumption-based data. There is no publicly available estimate of the reliability of the data collected and published.

8.   An alternative source of aggregate expenditure data, and the only source of data on (aggregate) incomes of Russian households, is the balance of monetary incomes and expenditures of Russian households calculated by Rosstat. The aggregate balance is based on all the available sources of information (wage bills paid by employers, purchase of currency at banks, etc.), and is performed for the national level and regional levels.

9.   There are two publicly available data sources on the income and expenditure of Russian households with transparent sample designs and rich data.

10.   First, the Russian Longitudinal Monitoring Survey (RLMS-HSE) is a nationally representative household survey initially run jointly by the Population Centre of the University of North Carolina and the Institute of Sociology of the Russian Academy of Sciences and from 2008 also by the Higher School of Economics[2]. About 4 000 households are sampled each year, covering all the family members, including

---

[2] Russia Longitudinal Monitoring survey, RLMS-HSE, conducted by HSE and ZAO "Demoscope" together with Carolina Population Center, University of North Carolina at Chapel Hill and the Institute of Sociology RAS. (RLMS-HSE sites: http://www.cpc.unc.edu/projects/rlms-hse, http://www.hse.ru/org/hse/rlms)

children. Eighteen rounds of the survey for 1992 to 2009 are currently available. Since the survey is dwelling-based, it has a panel component. The adult questionnaire is extremely rich on the labour market position and incomes of adult members. Both household income and expenditure are carefully measured by asking a large battery of questions. In particular, households report on food consumption in the last seven days and non-food consumption in the last three months. Income is measured by collecting individual-level data on wage and non-wage income from the labour market. The household questionnaire has additional questions in order to aggregate the information on the various public and private transfers and subsidies to a household. Importantly, there is a large section on household subsistence farming, which for a sizeable share of families in Russia represents an important part of household income. The survey provides the basis for the national-level calculations of income inequality and poverty measures presented here (other than those by Rosstat), as well as for the analysis of the incidence and duration of poverty.

11.   Second, the National households survey of welfare and social programs' participation (NOBUS) is a survey of Russian households conducted by Rosstat in April-May 2003 that was representative nationally and regionally (for 46 Russian regions). The sample was 45 000 households. The household part of the questionnaire had detailed questions on household composition and household consumption. Household income was measured by asking the household head to place their household into an income interval. Additionally, a question on the importance of various sources of income in total household income was asked. The main focus of the survey was to study various benefits and discounts received by a household through asking a large number of very detailed questions. The individual part of the questionnaire provides detailed information on the labour market status of adult household members. We base part of our regional analysis on this data.

12.   The poverty threshold that is used in the Russian official statistics is the official subsistence level calculated for working-age adults, pensioners and children. In each case the subsistence level is calculated as the cost of a minimum consumption basket that covers the basic food and non-food needs (services included) of an individual "sufficient for the normal functioning of the bodily organs and the preservation of health and required for the satisfaction of the main social and cultural necessities" (from the definition). It is widely believed, however, that the official subsistence level is enough for survival only and does not meet current requirements for sustaining health. The minimum consumption basket is approximately 15 percent higher in calories than the minimum dietary energy requirement determined by FAO/WHO/UNU (2 275 versus 1 970 calories). The Russian minimum food basket is also criticised for being based on actual (*i.e.* unhealthy) consumption patterns. Essentially, a healthier food consumption basket could be purchased at a lower cost (Mroz and Popkin, 1995). Since 1992, the minimum consumption basket in Russia has been revised by the official experts every five years. The changes have not been very significant, however. It is worth noting that the consumption basket is regionally specific and does not reflect household economies of scale.

13.   In the analysis below we utilise the concept of relative poverty, based on the methodology adopted by the OECD. In particular, the threshold used to measure relative poverty is 50% of the median equivalised disposable income of all individuals. The factor used to equivalise household disposable income is one divided by the square root of household size (Förster and d'Ercole 2005). Poverty and income inequality measures are calculated on an individual and not a household basis, and adjusted for differences in household size when calculating average measures. When absolute poverty measures are reported for RLMS-HSE data, the national and regional poverty lines developed by Popkin *et al.* (1996) are applied. The poverty lines are based on local diets that meet subsistence needs, taking into account regional prices and equivalence scales for family size. Since such absolute poverty lines are not available for the NOBUS database which is the basis for regional poverty profiles in this

report, the regional absolute poverty lines applied when utilising NOBUS are based on official regional subsistence levels published by Rosstat[3].

2. Poverty and inequality in Russia: National level measures. Determinants of the poverty incidence and poverty profiles.

2.1 Poverty measures

14.   Official Rosstat publications lack measures of relative poverty. Moreover, Rosstat measures are consumption-based. This was a reasonable approximation for income during the initial years of transition, when the non-reporting of income was high. The RLMS-HSE allows calculating both income-based and consumption-based relative and absolute poverty measures. Poverty rates (as a percent of individuals) are reported in Table 3 and Figure 1.

15.   There are several points to notice. First, income-based and expenditure-based relative poverty measures look very similar. The relative poverty rate was 17% in 1994, which increased to 20% and 24% respectively in 1998 and 2003. Recent years have seen a sizable decline in the relative poverty rate, to a level in 2007 of 17% if income-based or 18% if expenditure-based, and the decline has continued in 2008-2009. In 2009, the income-based and expenditure-based poverty rates reached 13% and 16%, respectively. A decline in absolute poverty had already started by 2001 and was very pronounced: from 26% in 2000 to 3% in 2009 (based on the RLMS-HSE regional subsistence level threshold).

Table 3.   Relative and absolute poverty rates, 1994-2009

year	Relative poverty, income-based, share of individuals	Relative poverty, expenditure-based, share of individuals	Absolute poverty, national subsistence level, RLMS-HSE, share of individuals	Absolute poverty, regional subsistence level, RLMS-HSE, share of individuals
1994	17%	18%	39%	17%
1995	20%	18%	51%	30%
1996	24%	19%	51%	36%
1998	20%	20%	62%	42%
2000	22%	21%	35%	26%
2001	21%	21%	26%	18%
2002	24%	22%	23%	15%
2003	23%	22%	18%	12%
2004	23%	24%	14%	9%
2005	16%	18%	13%	8%
2006	15%	18%	10%	6%
2007	17%	18%	9%	5%
2008	16%	18%	7%	4%
2009	13%	16%	5%	3%

Source: Author's calculation based on the RLMS-HSE.

Note: Sample weights are applied when calculating the statistics.

16.   Second, the comparative dynamic pattern of relative versus absolute poverty rates may reflect the specific features of how fast income has grown at different parts of the income distribution. In the early

---

[3] For more details on the comparison of the official regional subsistence levels and those used in RLMS please consult (Ferrer-i-carbonell and Praag 2001)

2000s incomes around the median income grew a bit faster than at lower levels. As a result, the absolute poverty rate was declining (especially since the poverty gap was not that large), while relative poverty edged up. It is only in 2005 that the incomes of those in the lower part of the income distribution increased faster than for those in the median group, thus leading to a reduction in the relative poverty rate.

Figure 1.   Relative and absolute poverty rates, 1994-2009, RLMS-HSE
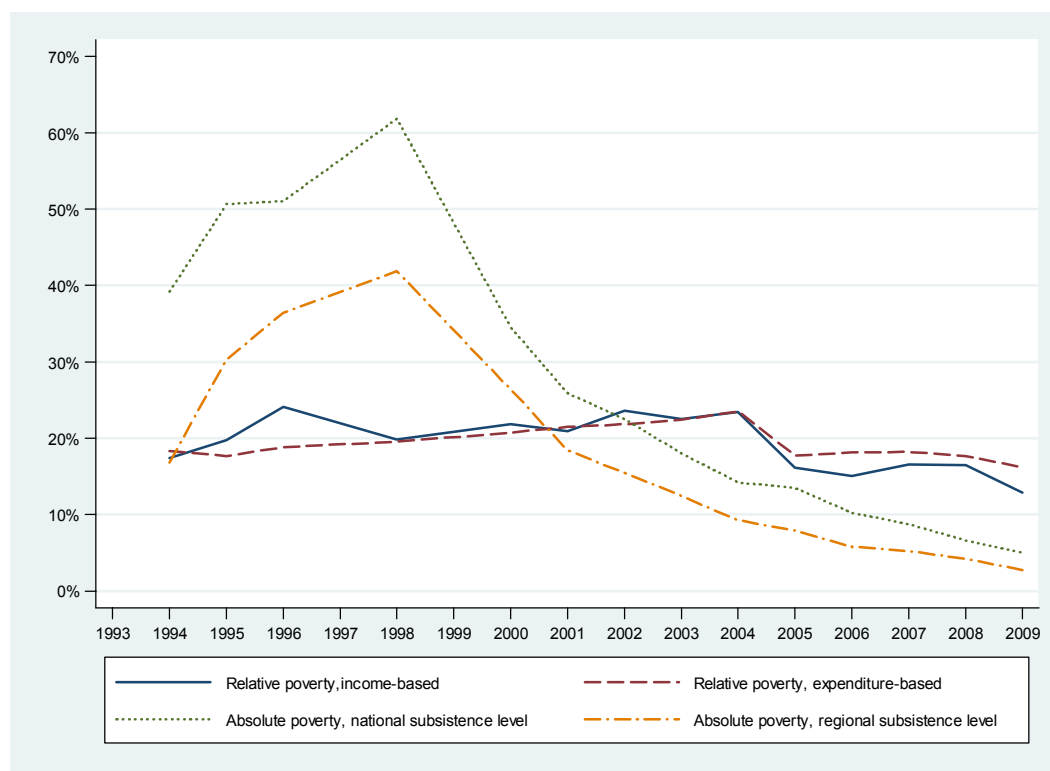
Source: Author's calculations based on the RLMS-HSE.

17.   The suggested pattern of the accelerated pace of change of incomes in the bottom part of the income distribution as compared to the median deciles is confirmed by the data for recent years. Figure 2a presents income percentile ratios for 2008 relative to 2007, and 2007 relative to 2006. The ratios are calculated by dividing (average) real income at the relevant percentile in, say 2008, to the (average) real income at the relevant percentile in 2007. It is clear from the picture that the real incomes of all the percentile groups were increasing during these years. The real incomes of the bottom percentiles were increasing at much higher rates in 2006/2007, but less so in 2007/2008.

Figure 2a.   Income Percentile Ratios, 2007 to 2006 (Real Income at Percentile P in 2007 divided by Real Income at Percentile P in 2006) and 2008 to 2007.
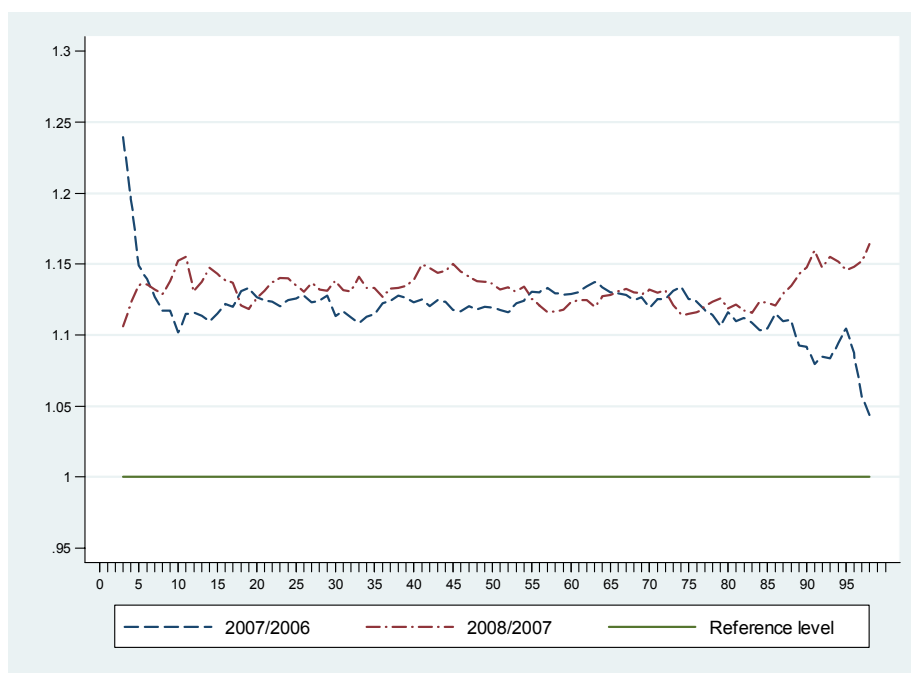
Source: Author's calculations based on the RLMS-HSE.

18.   Figure 2b presents income percentile ratios for 2009 relative to 2008, calculated in the same way as above. It is clear from the picture that the real income of the bottom percentile groups increased in 2009 from 2008. However, the real income of the upper percentile groups decreased in 2009, with the most significant decline being observed for the highest percentile groups (up to 11%). This could possibly be due to the effects of the financial crisis in Russia in 2008-2009.

Figure 2b.   Income Percentile Ratios, 2009 to 2008 (Real Income at Percentile P in 2009 divided by Real Income at Percentile P in 2008).
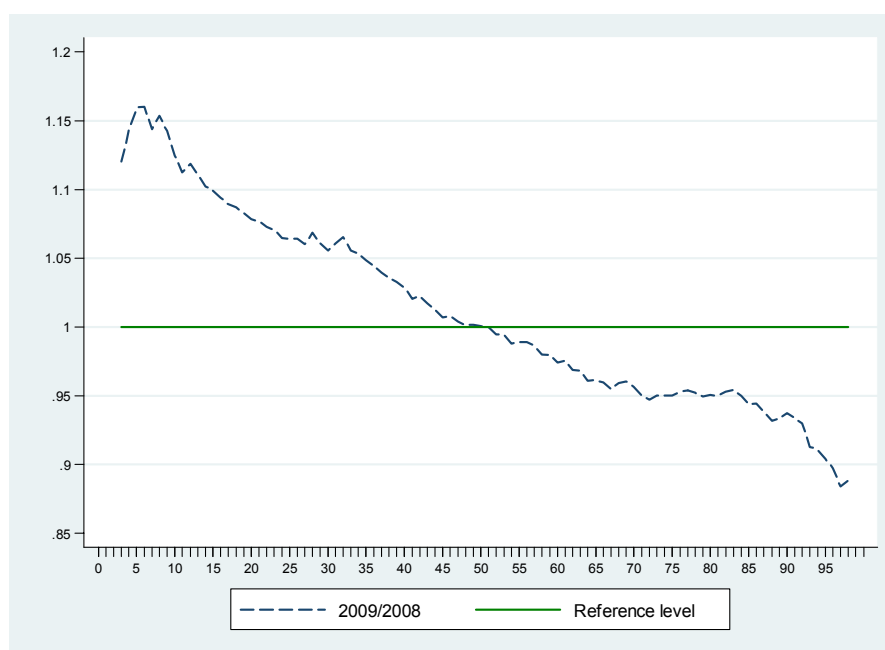
Source: Author's calculations based on the RLMS-HSE.

19.   The poverty gap is an important measure of poverty. It shows the deficit in income needed to reach the poverty threshold used, whether relative or absolute. Figure 3 reports the poverty gaps with respect to the relative poverty threshold in selected percentiles of those in relative poverty in selected years. For instance, it shows that the median poverty gap (measured at the 50th percentile of individuals in relative poverty) was 48% of the relative poverty threshold (i.e., half the median per capita income) in 2004 and declined to 33% in 2009. Not only was the poverty rate declining since 2004, but also the poverty gap. Indeed, the gap for the majority of those in relative poverty declined from 2004 to 2009 by more than ten percentage points. Second, in 2009 the one-third poorest individuals closest to the relative poverty threshold were lacking at most 20% of the income needed to climb out of poverty. The next 30% of the poor lacked 20-40% of the threshold income, with the median income gap being 33%. Ninety percent of those in relative poverty have a poverty gap of 65% or less. The poorest 5% lacked more than 74% of income, with the poorest 1% lacking 90% of income.

Figure 3.   Poverty gaps, relative poverty concept, by income percentiles
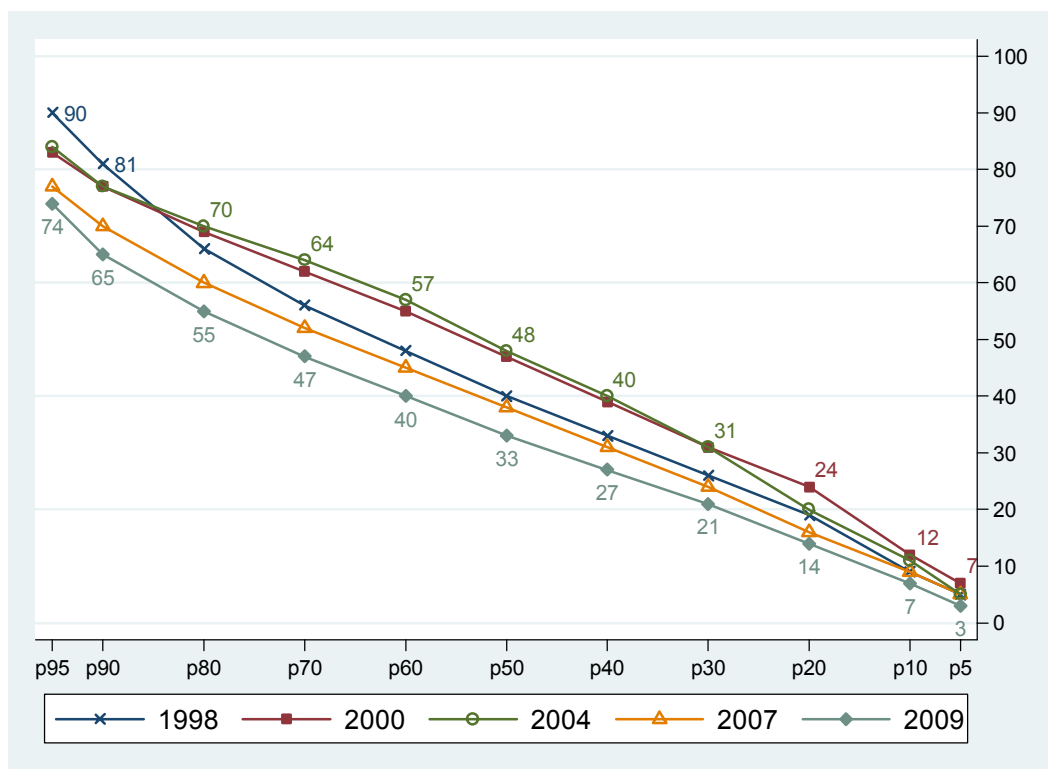
Source: Author's calculations based on the RLMS-HSE.

20.   Figure 4 reports poverty gaps with respect to the absolute poverty threshold (regional-based) again in selected percentiles of those in absolute poverty. The median poverty gap with respect to absolute poverty decreased from 41% in 1998 to 31% in 2008. About 75% of those in absolute poverty were lacking less than half of the income needed to get out of poverty, whereas the poorest 5% again lacked again more than 90% of the income needed. It is worth noting that the absolute poverty gap fell between 1994 and 2007, but rose slightly in 2008 for almost all income groups.

21.   Overall, we confirm that poverty gaps in Russia are below 30% for a majority of those in poverty, whether in relative or absolute terms. At the same time, about 5% of poor households have dramatic income gaps of more than 90%.

Figure 4.   Poverty gaps, absolute poverty concept, by income percentiles
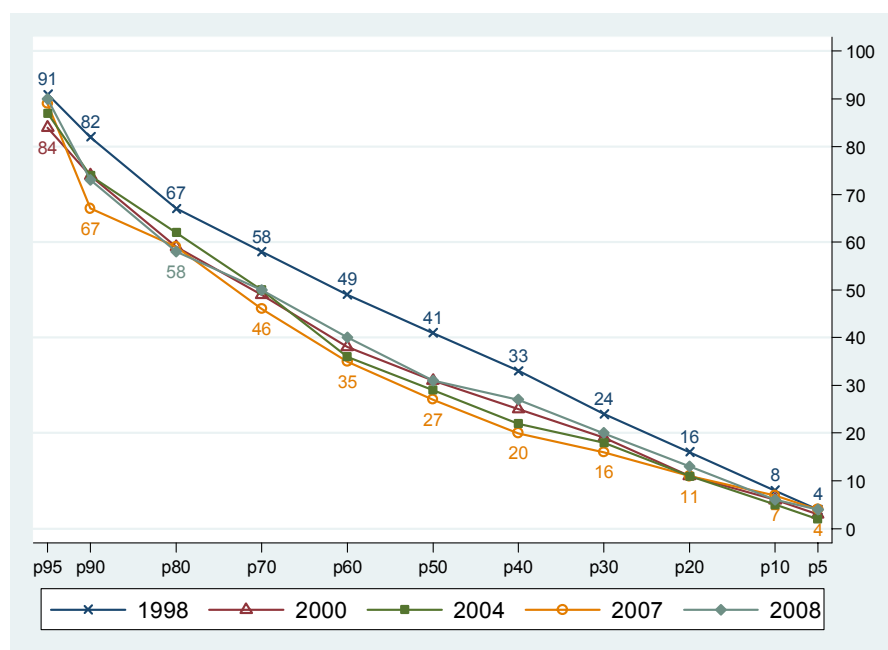
Source: Author's calculations based on the RLMS-HSE.

22.   In addition to the average picture, it is worth looking at group-specific poverty measures, in particular, the poverty rates of families with pensioners or with children. These are potentially vulnerable categories with a restricted ability to earn income in the labour market and thus with a high dependence on public transfers. Figures 5 and 6 report poverty rates, relative and absolute, in families with children but no pensioners, families with children and pensioners, and families with pensioners and no working-age adults.

23.   Relative poverty rates within these groups is rather volatile, with no unique trend. In the period from 2000 to 2004, families with children were better off than families with pensioners only. The reverse is true for the years 2005-2009. In 2009, the relative poverty rate (17%) was equal for individuals from families with children and no pensioners and for pensioners living on their own, whereas the poverty rate for individuals from families with pensioners and children was 6%.

Figure 5.   Relative poverty rates, families with children versus families with pensioners
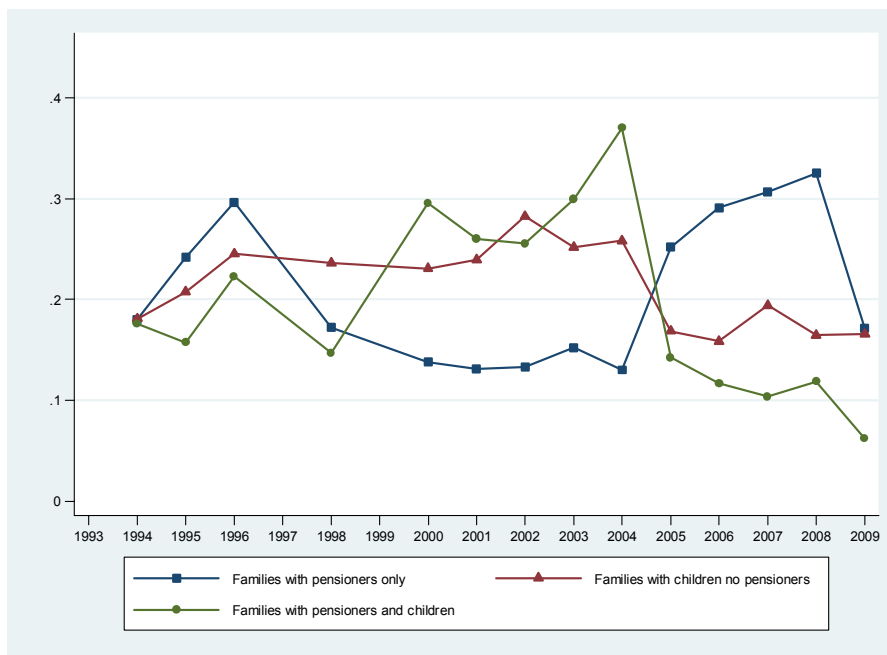
Source: Author's calculations based on the RLMS-HSE.

24.   Absolute poverty rates are consistently higher in families with children (with or without pensioners) than in families with pensioners only. By 2005, the absolute poverty rate among pensioners fell almost to zero, while it is still 1-5% for people in families with children.

Figure 6.   Absolute poverty rates, families with children versus families with pensioners
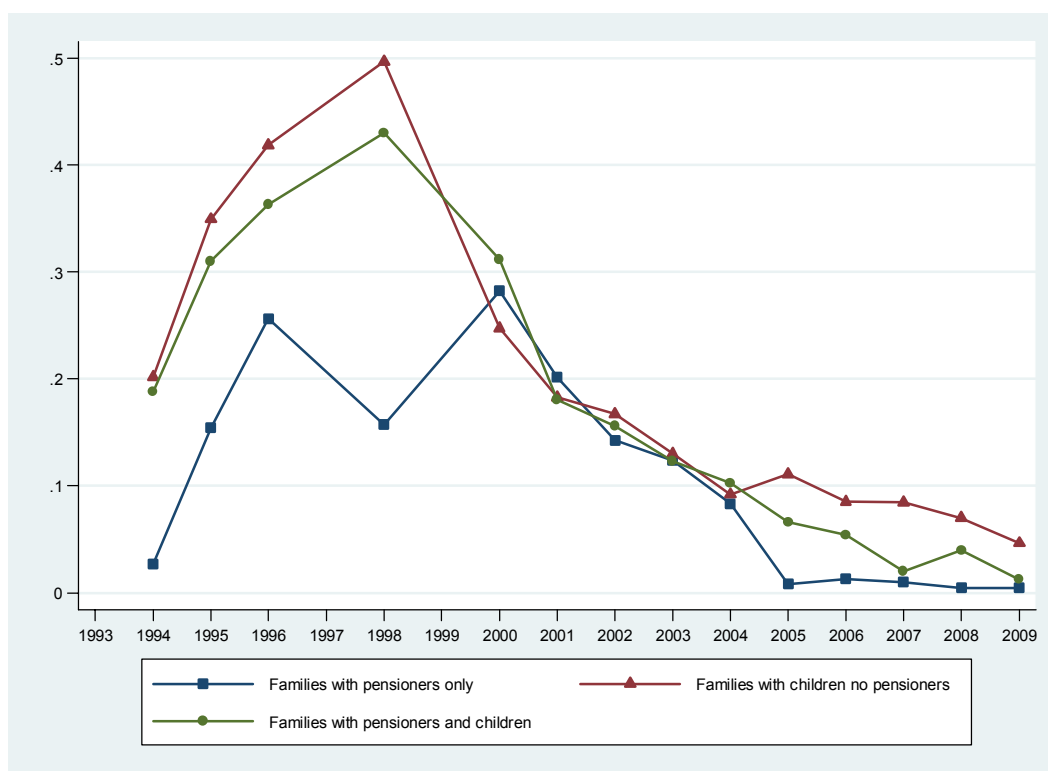
Source: Author's calculations based on the RLMS-HSE.

25.   A detailed discussion of the determinants of poverty incidence follows (Section 2.3) the discussion of inequality measures.

2.2 Inequality measures

26.   Table 4 illustrates inequality as measured by the Gini index on RLMS-HSE data. No clear dynamic pattern emerges, however, as instead the measure fluctuates within some interval. One could conclude that inequality stays rather high throughout the period, with no clear tendency to either increase or decrease. The Gini was 0.35 (income-based) and 0.42 (expenditure-based) in 2009. The sizeable changes in RLMS-HSE-based measures could reflect sample attrition problems in the survey or could point to the actual abnormally large variation in income as a result of wage volatility in Russia. The difference in patterns of real growth of income for each percentile in 2007 as compared to 2006, and 2008 as compared to 2007 illustrated by Figure 2a, and a dramatic change of the pattern in 2009 as compared to 2008 presented in Figure 2b provide at least some indication of the role of wage-adjustment in the Russian labour market.

Table 4. Income inequality: Gini index, 1994-2009, average and in subgroups

	Income-based, average	Expenditure-based, average	Income-based, adult head	Income-based, retired head	Income-based, with children
1994	0.46	0.48	0.47	0.32	0.46
1995	0.44	0.45	0.44	0.36	0.44
1996	0.49	0.46	0.49	0.49	0.47
1998	0.44	0.47	0.45	0.36	0.44
2000	0.50	0.52	0.50	0.49	0.49
2001	0.49	0.49	0.49	0.45	0.47
2002	0.49	0.49	0.48	0.51	0.46
2003	0.48	0.51	0.48	0.49	0.48
2004	0.50	0.51	0.49	0.46	0.47
2005	0.37	0.43	0.37	0.29	0.37
2006	0.39	0.50	0.38	0.35	0.37
2007	0.38	0.48	0.37	0.31	0.37
2008	0.48	0.50	0.46	0.54	0.53
2009	0.35	0.42	0.34	0.36	0.35

Source: Author's calculations based on the RLMS-HSE.

Note: Income is defined as equivalised disposable income. Nominal equivalised income is deflated by regional cost of life as measured by Rosstat regional subsistence level.

2.3 Determinants of the incidence of poverty

27.   To identify the determinants of poverty incidence (absolute and relative, income-based), we ran probit regressions for 1994-2007, year by year. The probability of being poor in a given year is the dependent variable, while the explanatory variables include demographic composition and labour market attachment variables, as well as the characteristics of family human capital and public transfers as measured indirectly by the share of pensioners in a household[4].

28.   The first subgroup of variables reflects the demographic composition of households in the sample. The mean family size is 2.75. About 80% of households do not have any children under age 7, 18% have only one child in that age group, and 2% have two children or more. Almost 70% of households do not have any children aged 7-18, 23% have one child in that age group, another 8% have two children, and only 1% have 3 children or more. Most households – 60% – are headed by adult males, with 14% being headed by adult females, 12% by retired males, and 13% by retired females.

29.   The second subgroup of variables reflects the labour market attachment of household members. In particular, 63% of adults in the sample are in the labour force, with 60% having a job and less than 5% unemployed according to the ILO/BLS definition. On average, the share of households with an adult working in the public sector is 26%, while 14% of families are involved in subsistence farming.

30.   The role of public transfers in shaping poverty patterns in Russia is reflected by the share of pension recipients. The average ratio of those receiving pensions to adults in a household is about 40%. Additionally, the role of child benefits is reflected indirectly by the share of children in households.

---

[4] Note that we use income-based poverty measures here and thus do not take into account savings by pensioners living in the same household. Pensioners living separately could potentially support thei children and grandchildren through transfers based on their savings. The default of the banking system and hyperinflation of the beginning of the 90ies, however, wiped out savings of Russians thus limiting their role. This is confirmed by a very limited role for transfers from relatives as an income source in RLMS.

31.   The next subgroup of variables is related to the characteristics of human capital in the family. In particular, we consider the share of adults in bad and very bad health and their educational attainment. The mean share of adults in bad health is 18%. The average share of adults who have completed secondary school only is 11%, while in poor families the share is 15% The share of adults with a university degree is 16% on average. Most families in the sample (66%) live in urban areas.

32.   Tables 5 and 6 report the results of the estimations of probability of relative and absolute poverty, respectively. Marginal effects are reported. The results show that, controlling for all other factors, larger families tend to have a lower probability of being in poverty, with the incidence of poverty reduced by three to five percentage points as family size increases. The presence of children increases the chance of being in poverty, with a marginal effect of six to eight percentage points for both younger (under age 7) and older (age 7-18) children.

33.   Female-headed households tended not to be worse off than male-headed households during the earlier years. Starting from 2003, female-headed households are 5 to 10 percentage points more likely to be in relative poverty than households headed by an adult male.

34.   The higher the share of pensioners in the households, the lower the probability of being poor. The size of the effect of presence of pensioners in a household   is rather large: from 10 to 15 percentage points on average, with about 30 percentage points in the years after the 1998 financial crisis.

35.   Labour market attachment is important for reducing poverty incidence: a higher share of adults in the household who are in the labour force diminishes poverty incidence by almost 20 percentage points. The effect is even more pronounced for unemployment: unemployment in a household increases the risk of poverty by 30 percentage points. At the same time, being unemployed does not imply poverty with certainty, just as having a job is not necessarily a guarantee against being in poverty. Working poverty is considered in more detail in the next section.

36.   Having a university degree reduces the risk of poverty by 10 to 15 percentage points on average and by about 20 percentage points during the years after the 1998 crisis. Subsistence farming reduces the poverty probability by about 10 percentage points. Those living in urban areas have a lower chance of being in relative poverty than those living in rural areas.

Table 5.   Determinants of relative poverty incidence. Marginal effects reported (Reference category for household types: HH headed by adult male).

	1994	1996	1998	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Family size, number of people in family	-0.04	-0.05	-0.067	-0.042	-0.038	-0.041	-0.029	-0.035	-0.05	-0.051	-0.048	-0.036	-0.036
	[0.009]***	[0.010]***	[0.010]***	[0.009]***	[0.010]***	[0.009]***	[0.010]***	[0.006]***	[0.012]***	[0.009]***	[0.007]***	[0.003]***	[0.003]***
Number of kids <7 yrs in HH	0.072	0.061	0.103	0.054	0.074	0.086	0.062	0.066	0.078	0.082	0.07	0.036	0.022
	[0.016]***	[0.022]***	[0.022]***	[0.016]***	[0.018]***	[0.018]***	[0.018]***	[0.013]***	[0.022]***	[0.015]***	[0.012]***	[0.006]***	[0.005]***
Number of kids 7-18 yrs in HH	0.052	0.056	0.083	0.061	0.065	0.077	0.063	0.071	0.068	0.079	0.078	0.020	0.023
	[0.012]***	[0.017]***	[0.014]***	[0.013]***	[0.015]***	[0.014]***	[0.015]***	[0.010]***	[0.019]***	[0.012]***	[0.010]***	[0.005]***	[0.005]***
HH headed by adult female	0.039	0.014	0.033	0.105	0.04	0.021	0.059	0.034	0.12	0.091	0.044	0.157	0.028
	[0.032]	[0.026]	[0.025]	[0.032]***	[0.025]	[0.020]	[0.026]**	[0.022]	[0.033]***	[0.030]***	[0.021]**	[0.012]***	[0.010]***
HH headed by retired male	-0.119	-0.027	-0.061	-0.035	-0.006	-0.021	0.022	-0.009	-0.019	0.015	0.005	0.020	0.031
	[0.009]***	[0.039]	[0.030]**	[0.023]	[0.016]	[0.018]	[0.024]	[0.016]	[0.030]	[0.033]	[0.026]	[0.016]	[0.024]
HH headed by retired female	0.098	0.009	0.018	0.014	0.041	0.033	-0.015	0.047	0.156	0.198	0.139	0.317	0.232
	[0.052]*	[0.042]	[0.048]	[0.039]	[0.041]	[0.033]	[0.027]	[0.037]	[0.063]**	[0.061]***	[0.044]***	[0.025]***	[0.042]***
Share of adults in LF	-0.228	-0.322	-0.193	-0.391	-0.345	-0.444	-0.379	-0.454	-0.254	-0.22	-0.16	-0.321	-0.217
	[0.041]***	[0.035]***	[0.032]***	[0.028]***	[0.039]***	[0.031]***	[0.022]***	[0.030]***	[0.040]***	[0.027]***	[0.021]***	[0.018]***	[0.013]***
Share of adults unemployed BLS	0.331	0.37	0.307	0.361	0.292	0.382	0.329	0.323	0.342	0.32	0.266	0.555	0.406
	[0.042]***	[0.047]***	[0.041]***	[0.045]***	[0.055]***	[0.046]***	[0.040]***	[0.043]***	[0.052]***	[0.047]***	[0.036]***	[0.041]***	[0.024]***
Share of adults with bad health	0.081	0.053	0.048	0.033	0.065	0.119	0.119	0.091	0.049	0.019	0.028	0.018	-0.007
	[0.025]***	[0.029]*	[0.027]*	[0.026]	[0.030]**	[0.034]***	[0.027]***	[0.022]***	[0.022]**	[0.019]	[0.016]*	[0.016]	[0.011]
Share of pensioners	-0.148	-0.174	-0.176	-0.285	-0.307	-0.326	-0.287	-0.279	-0.189	-0.162	-0.111	-0.166	-0.224
	[0.040]***	[0.030]***	[0.034]***	[0.030]***	[0.037]***	[0.030]***	[0.031]***	[0.030]***	[0.040]***	[0.026]***	[0.020]***	[0.017]***	[0.019]***
Share of adults in public sector	0.065	0.141	0.032	0.025	0.031	0.072	0.017	0.106	0.017	-0.012	-0.013	0.024	-0.008
	[0.026]**	[0.029]***	[0.022]	[0.037]	[0.037]	[0.028]**	[0.030]	[0.021]***	[0.022]	[0.020]	[0.017]	[0.014]*	[0.010]
Share of adults with university degree	-0.177	-0.176	-0.133	-0.212	-0.219	-0.174	-0.199	-0.154	-0.119	-0.147	-0.101	-0.147	-0.129
	[0.027]***	[0.030]***	[0.028]***	[0.036]***	[0.033]***	[0.041]***	[0.035]***	[0.027]***	[0.024]***	[0.022]***	[0.017]***	[0.014]***	[0.010]***
Share of adults with secondary school only	0.021	0.097	0.066	0.047	0.048	0.051	0.09	0.072	0.104	0.058	0.072	0.062	0.032
	[0.023]	[0.035]***	[0.032]**	[0.030]	[0.041]	[0.030]*	[0.026]***	[0.022]***	[0.026]***	[0.024]**	[0.020]***	[0.013]***	[0.009]***
Family involved in subsistence farming	-0.12	-0.108	-0.147	-0.124	-0.104	-0.098	-0.089	-0.043	-0.078	-0.067	-0.14	-0.009	-0.010
	[0.016]***	[0.023]***	[0.018]***	[0.014]***	[0.018]***	[0.018]***	[0.017]***	[0.014]***	[0.020]***	[0.013]***	[0.011]***	[0.006]	[0.006]*
Live in urban area	-0.06	-0.135	-0.032	0.009	-0.006	-0.041	-0.039	-0.019	-0.149	-0.118	-0.115	-0.029	-0.087
	[0.025]**	[0.035]***	[0.026]	[0.015]	[0.020]	[0.018]**	[0.018]**	[0.017]	[0.029]***	[0.022]***	[0.023]***	[0.008]***	[0.008]***
Observations	10676	10070	10223	9885	10777	11209	11373	11150	11652	13833	13820	14518	13278

Standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 6. Determinants of absolute poverty incidence. Marginal effects reported (Reference category for household types: HH headed by adult male).

	1994	1996	1998	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Family size, number of people in family	-0.021	-0.045	-0.041	-0.025	-0.016	-0.035	-0.017	-0.024	-0.013	-0.012	-0.01	-0.009	-0.003
	[0.007]***	[0.013]***	[0.013]***	[0.011]**	[0.011]	[0.007]***	[0.007]**	[0.005]***	[0.006]**	[0.004]***	[0.003]***	[0.002]***	[0.002]*
Number of kids <7 yrs in HH	0.06	0.082	0.139	-0.01	0.027	0.052	0.026	0.019	0.026	0.027	0.015	0.013	0.002
	[0.015]***	[0.025]***	[0.022]***	[0.019]	[0.019]	[0.014]***	[0.012]**	[0.009]**	[0.011]**	[0.008]***	[0.007]**	[0.004]***	[0.003]
Number of kids 7-18 yrs in HH	0.038	0.096	0.104	0.01	0.011	0.045	0.02	0.027	0.027	0.027	0.019	0.015	0.006
	[0.012]***	[0.020]***	[0.020]***	[0.016]	[0.012]	[0.012]***	[0.012]*	[0.008]***	[0.010]**	[0.005]***	[0.006]***	[0.004]***	[0.002]**
HH headed by adult female	0.033	-0.02	-0.019	0.026	0.009	0.014	-0.013	0.018	0.032	0.008	0.008	0.019	-0.002
	[0.031]	[0.035]	[0.044]	[0.027]	[0.020]	[0.022]	[0.011]	[0.015]	[0.012]***	[0.008]	[0.006]	[0.009]**	[0.004]
HH headed by retired male	-0.122	-0.147	-0.311	0.008	0.013	-0.011	-0.014	-0.006	-0.04	-0.028	-0.015	-0.023	
	[0.014]***	[0.030]***	[0.035]***	[0.028]	[0.027]	[0.019]	[0.017]	[0.014]	[0.008]***	[0.007]***	[0.007]**	[0.005]***	
HH headed by retired female	-0.11	-0.132	-0.254	-0.005	0.029	0.01	-0.011	0.021	-0.036	-0.017	-0.017	-0.019	0.030
	[0.014]***	[0.036]***	[0.042]***	[0.029]	[0.030]	[0.020]	[0.024]	[0.019]	[0.009]***	[0.009]*	[0.005]***	[0.005]***	[0.031]
Share of adults in LF	-0.169	-0.389	-0.27	-0.051	-0.038	-0.084	-0.037	-0.075	-0.099	-0.076	-0.081	-0.093	-0.043
	[0.037]***	[0.048]***	[0.043]***	[0.023]**	[0.019]**	[0.015]***	[0.014]***	[0.012]***	[0.020]***	[0.014]***	[0.012]***	[0.015]***	[0.008]***
Share of adults unemployed BLS	0.301	0.496	0.466	0.295	0.295	0.267	0.203	0.167	0.139	0.085	0.083	0.129	0.078
	[0.040]***	[0.050]***	[0.066]***	[0.049]***	[0.047]***	[0.036]***	[0.028]***	[0.029]***	[0.021]***	[0.021]***	[0.021]***	[0.026]***	[0.014]***
Share of adults with bad health	0.098	0.08	0.134	0.05	0.045	0.083	0.048	0.018	0.034	0.009	0	0.001	-0.017
	[0.029]***	[0.042]*	[0.037]***	[0.031]	[0.030]	[0.029]***	[0.020]**	[0.019]	[0.017]**	[0.010]	[0.013]	[0.012]	[0.007]**
Share of pensioners	-0.179	-0.245	-0.155	-0.285	-0.251	-0.242	-0.182	-0.176	-0.127	-0.084	-0.087	-0.060	-0.052
	[0.038]***	[0.038]***	[0.045]***	[0.029]***	[0.029]***	[0.030]***	[0.017]***	[0.020]***	[0.025]***	[0.017]***	[0.014]***	[0.013]***	[0.009]***
Share of adults in public sector	0.038	0.141	0.125	0.051	0.031	0.027	0.02	0.028	-0.004	-0.007	0	-0.007	-0.002
	[0.018]**	[0.031]***	[0.032]***	[0.022]**	[0.025]	[0.022]	[0.016]	[0.013]**	[0.012]	[0.008]	[0.007]	[0.011]	[0.007]
Share of adults with university degree	-0.131	-0.204	-0.227	-0.204	-0.153	-0.085	-0.091	-0.085	-0.047	-0.046	-0.021	-0.022	-0.017
	[0.027]***	[0.043]***	[0.039]***	[0.039]***	[0.038]***	[0.036]**	[0.022]***	[0.021]***	[0.015]***	[0.011]***	[0.010]*	[0.010]**	[0.007]**
Share of adults with secondary school only	0.033	0.128	0.191	0.131	0.134	0.108	0.119	0.086	0.039	0.015	0.017	0.013	-0.000
	[0.028]	[0.037]***	[0.044]***	[0.026]***	[0.020]***	[0.022]***	[0.018]***	[0.015]***	[0.015]**	[0.012]	[0.009]*	[0.008]	[0.005]
Family involved in subsistence farming	-0.099	-0.148	-0.264	-0.09	-0.065	-0.06	-0.069	-0.006	-0.039	-0.021	-0.025	-0.002	0.000
	[0.014]***	[0.037]***	[0.036]***	[0.028]***	[0.021]***	[0.021]***	[0.017]***	[0.016]	[0.008]***	[0.005]***	[0.005]***	[0.005]	[0.003]
Living in urban area	-0.061	-0.189	-0.041	-0.046	-0.016	-0.066	-0.057	-0.03	-0.087	-0.049	-0.034	-0.009	-0.029
	[0.025]**	[0.049]***	[0.041]	[0.029]	[0.024]	[0.024]***	[0.019]***	[0.015]**	[0.019]***	[0.016]***	[0.013]***	[0.007]	[0.010]***
Observations	10676	10070	10223	9885	10777	11209	11373	11150	11652	13833	11847	14518	12351

Standard errors in brackets; Reference category for household types: HH headed by adult male
* significant at 10%; ** significant at 5%; *** significant at 1%

37.   The results are practically the same when the determinants of absolute poverty are considered. The only difference is that all the factors have a lower marginal effect.

38.   Overall, the results confirm that even after controlling for other factors, families with children have a higher chance of being poor. Pension transfers significantly reduced poverty rates among the elderly. Unemployment increases the chance of poverty. A good education (university degree) is a buffer against poverty. Subsistence farming also reduces the poverty incidence, though it is important to notice that causality is likely to run in the opposite direction: people get involved in subsistence farming in order to escape poverty.

2.4 Trends and patterns of working poverty

39.   Working people make up a very sizable share of the poor in Russia. A sharp increase in earnings differences among those who have jobs, and in particular the existence of a high number of low-paid jobs, is likely to be part of an explanation of the large share of working poor. Table 7 shows wage differentiation as reported by Rosstat. The ratio of the average wage of the highest decile to that of the lowest is reported to rise from 21.2 in 2002 to 25.3 in 2006 and then to fall to 22.1 in 2007. The share of the low-paid, defined as those with a wage below the subsistence level, declined from 24.4% in 2005 to 22.2% in 2006 and 16.5% in 2007. The sizable decline of the share of low-paid workers in 2007 is likely to reflect efforts to eliminate below-subsistence wages by sending inspections to organisations reporting paying very low wages in order to identify "grey wage" schemes. Nevertheless, one out of every five or six workers received below-subsistence wages in 2007. The wages of another 28% were in the range of one to two subsistence levels (Rosstat, p. 396), implying a high risk of absolute poverty for their families.

Table 7.   Wage differentiation in Russia

	1995	2000	2001	2002	2005	2006	2007
Ratio of average wage of the 10th decile to the 1st decile	20.6	20.8	25.4	21.2	24.9	25.3	22.1
Share of employees with a wage below subsistence level, %	32.5	25.7	23.9	18.9	24.4	22.2	16.5

Source: Labor and Employment in Russia (2003, 2005), Rosstat, pp. 406-407 (2003) and p. 402 (2007). Based on surveys in Aprils.

40.   Low-paid workers also have a high chance of being in relative poverty. Indeed, if the low-paid are defined as those with wages below two-thirds of the national median, then the share of low-paid employees could amount to a third of all employees (the median wage is reported to be in the interval from two to three subsistence levels). The estimates for 2007 are consistent with the figure of 34% reported earlier, in 1999 (UNICEF, 2001, p. 30). This is very high when compared to the OECD average of 14% or to 19% in Poland (Ibid).

41.   At the same time, the link between low wages and poverty is not completely straightforward. Table 8 provides estimates of relative poverty incidence *within* groups of those employed and those not employed for 2000 and 2007 (columns 1 and 2). Additionally, profiles of poverty (columns 3 and 4) and non-poverty (columns 5 and 6), or concentration ratios in the groups based on labour market attachment and position in the regional wage distribution, are presented for 2000 and 2007. The distribution of the working-age population across the groups for 2000 and 2007 are presented in columns 7 and 8, respectively.

Table 8.   Relative poverty among working-age (18-64) people in Russia, 2000 and 2007

| | Poverty rate, % | | Concentration ratio: population shares,% | | | | | |
| | | | In poverty | | In non-poverty | | All | |
	2000	2007	2000	2007	2000	2007	2000	2007
Not employed								
Not in the labour force	21.3	18.5	36.8	45.7	28.1	27.1	29.6	29.3
Unemployed BLS	32.5	30.0	12.2	8.8	5.2	2.8	6.4	3.5
Employed								
Not worked in last month	19.6	10.9	1.7	1.4	1.4	1.5	1.5	1.5
Not paid in last month	39.7	21.5	5.4	2.3	1.7	1.1	2.4	1.3
Pay below 2/3 of regional median wage	23.4	18.2	25.6	25.3	17.4	15.3	18.8	16.5
Pay above 2/3 of regional median wage but below median wage	13.6	8.3	8.2	9.6	10.7	14.2	10.3	13.7
Pay above regional median wage	5.6	2.4	10.2	6.9	35.4	38.0	31.1	34.3
All	17.2	11.8	100	100	100	100	100	100

Source: Author's calculations based on methodology in Klugman et al. (2002).

42.   As is seen from the table, the highest incidence of relative poverty in 2007 is in the group of unemployed – 32% in 2000 and 30% in 2007. At the same time the group is rather small, and as a result comprises only about 10% of those in poverty. The majority of those in poverty are those not employed and not in the labour force (students and non-working adults).

43.   The incidence of poverty among those employed is high, and their representation in the group of the poor is sizeable. In 2000, the low-paid (with the wage below two-thirds of regional median wage) have an almost thirty percent higher incidence of poverty than the average – 23.4% versus 17.2%. The gap increased even further by 2007, when the low-paid had a poverty incidence rate of 18.2%, versus the average of 11.8%. The low-paid also constitute a quarter of those in poverty. At the same time, the rates indicate that not all the low-paid are in poverty. Moreover, from 10% (2000) to 7% (2007) of the poor earn wages above the regional median rate. This points, first, to the importance of household composition (*cf.* Section 2.3), and, second, to the skewed wage distribution, with a rather low level of median wages that make various public transfers and subsidies (modest in size) comparable with wages in shaping the household's relative income position.

3. Regional poverty and inequality

44.   Given the diversity of the economic situation across regions in Russia, reflected by huge variations in per capita gross regional products, in growth rates, in levels of wages and in unemployment rates, one would expect a large variation in inequality and poverty rates. The sources of information on household welfare by regions are very limited. Rosstat publishes aggregate information on income inequality and absolute poverty in Russian regions. The estimates are based on the aforementioned complicated and non-transparent procedure for the adjustment of the micro-data to the assumed distributions.

Figure 7.   Gini inequality measure by Russian regions , 2009
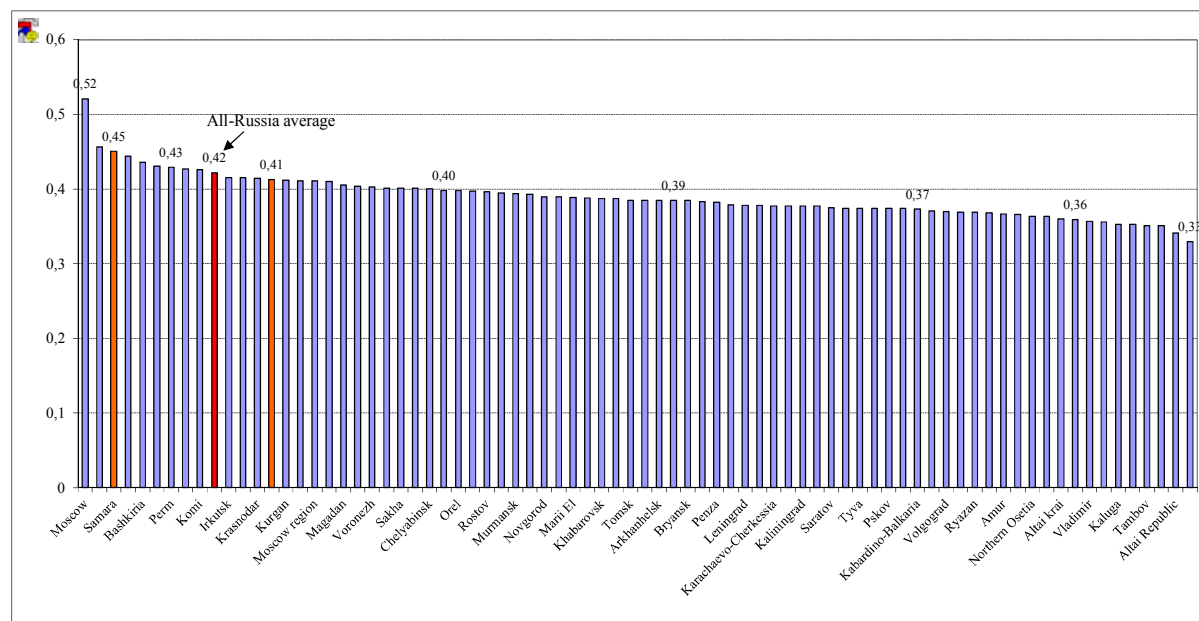
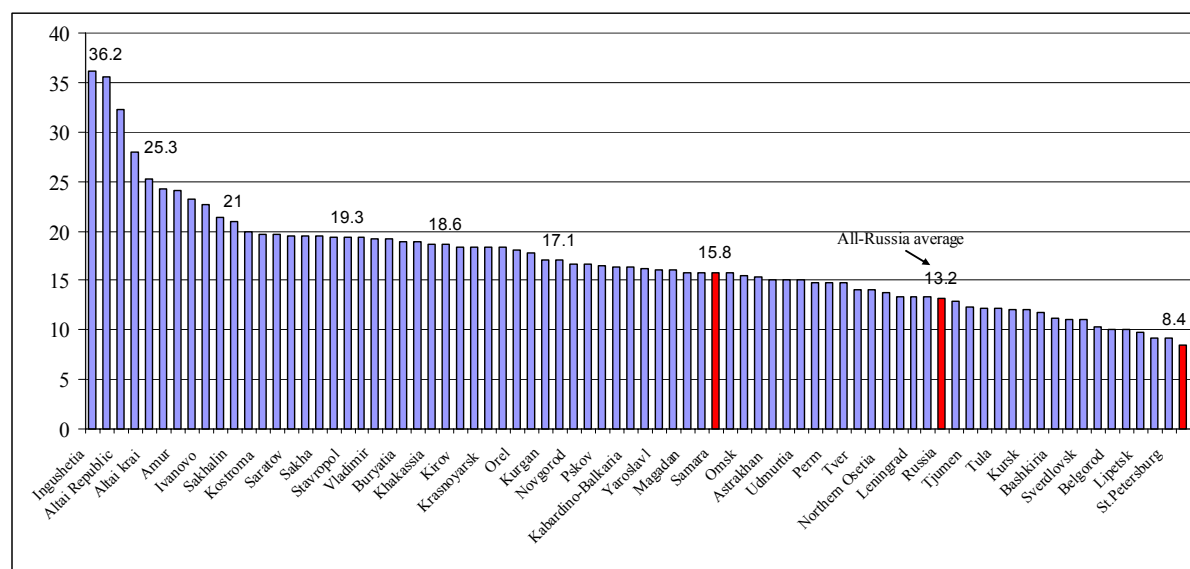Source: Socialnoe polozhenie i uroven zhizni naseleniya Rossii, Rosstat (2010), pp. 147-149

Note: Income is defined as per capita monetary disposable income.

45.   Figure 7 presents the Gini measure of income inequality within regions in 2009. First, there is a sizable variation across regions, with the maximum income inequality observed in Moscow (0.52) and the lowest in the Republic of Ingushetia (0.33). The national average is 0.42.

46.   There are nine regions where inequality exceeds the national average, including Samara,[5] followed by a large group of regions where inequality is slightly below the national mean (including Tatarstan). There is some indication that regions that are experiencing more rapid economic development are among the leaders in income inequality, while economically less advanced regions have a more equal income distribution. Note that one should treat the regional results very cautiously given the questionable quality of the regional data.

47.   Poverty rates (with respect to absolute poverty thresholds differentiated by regions) are more diverse than inequality measures (Table 8). The Ingushetia Republic and Kalmikia Republic are the leaders in poverty, with rates of 36.2% and 35.5%, respectively. Another 58 regions have poverty rates in excess of the national average, which was 13.2% in 2009. Samara is slightly above the national average (15.8%), while Tatarstan is well below the average (8.4%). Tatarstan has the lowest poverty rate among regions.

---

[5] In the course of preparing for OECD (2011), the OECD mission team visited Moscow, Kazan (Tatarstan) and Samara.

Figure 8. Absolute poverty rate by Russian regions , 2009

Leningrad stands for Leningrad oblast; the city of St.Petersburg is a separate region in Russia

Source: Socialnoe polozhenie i uroven zhizni naseleniya Rossii, Rosstat (2010), pp. 155-158.

48.   To get an idea about the variation in relative poverty across Russia's regions, NOBUS was used to estimate relative poverty rates for the regions for which the data are regionally-representative[6]. The estimates are presented in Figure 9. To take into account possible differences in the regional versus national distribution, two measures of relative poverty were calculated: against the national threshold, and against each region's respective threshold. In addition, absolute poverty rates against regional subsistence levels are also presented.

49.   The regional differences in absolute poverty are much greater than those in relative poverty. Indeed, relative povertyrate varies from 18% in Amur Oblast to 8% in Rostov Oblast, with the national average at the level of 13% (the two measures of relative poverty – versus the national threshold or regional threshold – gave very similar results). By contrast, absolute poverty varies much more. Both Samara and Tatarstan show slightly above average levels of relative poverty (15% and 14%, respectively). Absolute poverty is higher in Samara (23% against 14% in Tatarstan), which is in line with the Rosstat data.

---

[6]There are 46 such regions in NOBUS dataset. Observations from other regions in the data are to provide national representation of the data.

Figure 9.   Relative and absolute poverty rate by Russian regions, NOBUS, 2003, total sample
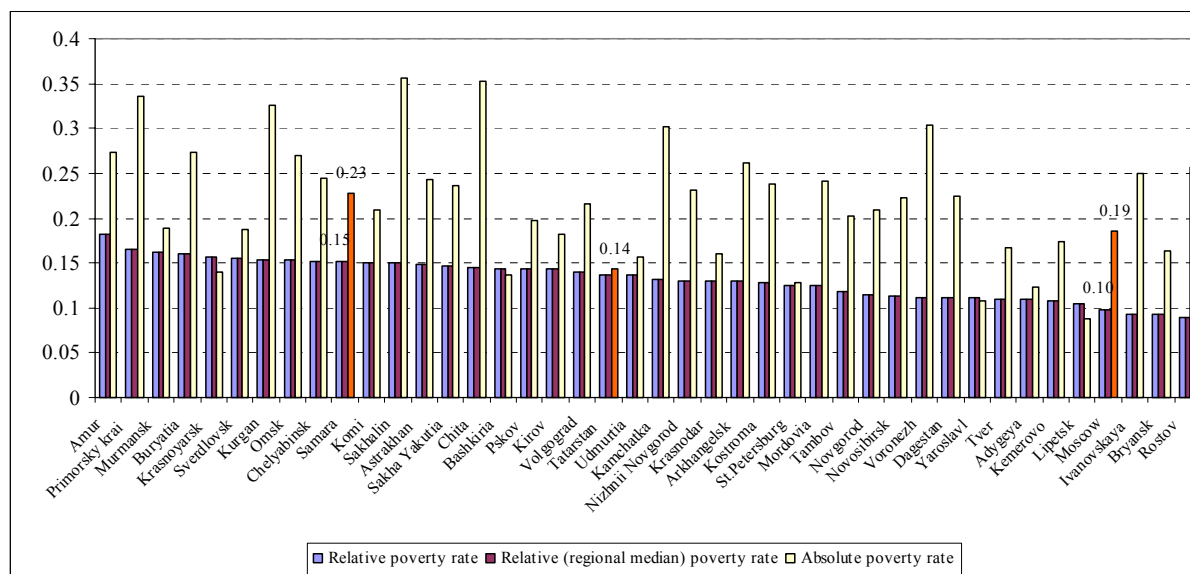
Source: Author's calculations based on NOBUS (2003).

50.   An interesting question that the micro data helps to answer is whether average poverty rates for families with children differ from those for families with pensioners across regions. Figure 10 presents this comparison for relative poverty rates.

51.   First, there is a significant variation in the poverty rates of the two groups in at least half of the regions. This is reflected in the difference in the national means, which are 11% for families with children and 18% for families with pensioners. Second, the comparison allows identifying regions with a stronger "bias" towards families with children, which could result either from more favourable labour market conditions or from social policy, or both. For instance, the relative poverty rate among families with children in Moscow is 4%, while it is 19% for families with pensioners. The pattern in Omsk is different, with poverty among families with children being higher than among families with pensioners (18% versus 14%). The rates in Samara are 23% for families with pensioners and 12% for families with children, and in Tatarstan 19% and 11%, respectively. Absolute poverty rates show roughly similar regional patterns.

Figure 10.   Relative poverty rates by Russian regions, NOBUS, 2003, families with children versus families with pensioners
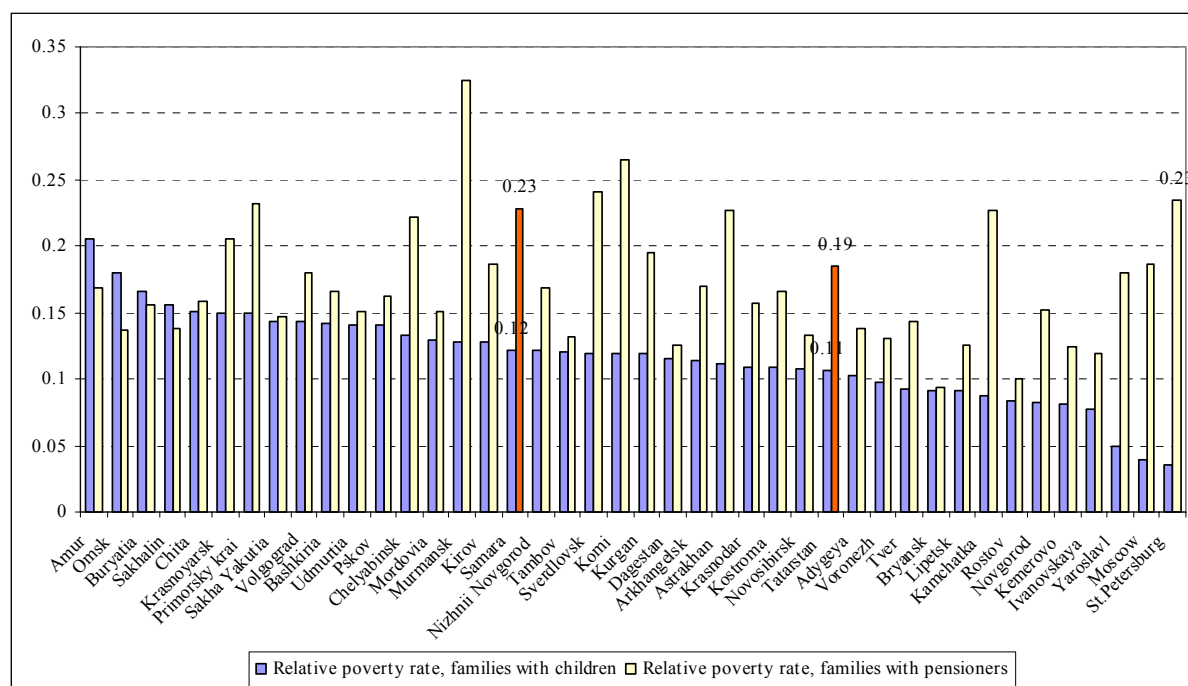
Source: Author's calculations based on NOBUS (2003).

52.   There is much less variation in the poverty gap, both with respect to absolute and relative threshold, across regions and across groups. The average relative gap is 35% for the total sample, and 33% and 36% for families with children and pensioners, respectively. The average absolute poverty gap is 28% both in the total sample and among families with children and 27% in families with pensioners.

Figure 11.   Poverty gap, absolute and relative, by Russian regions, NOBUS, 2003
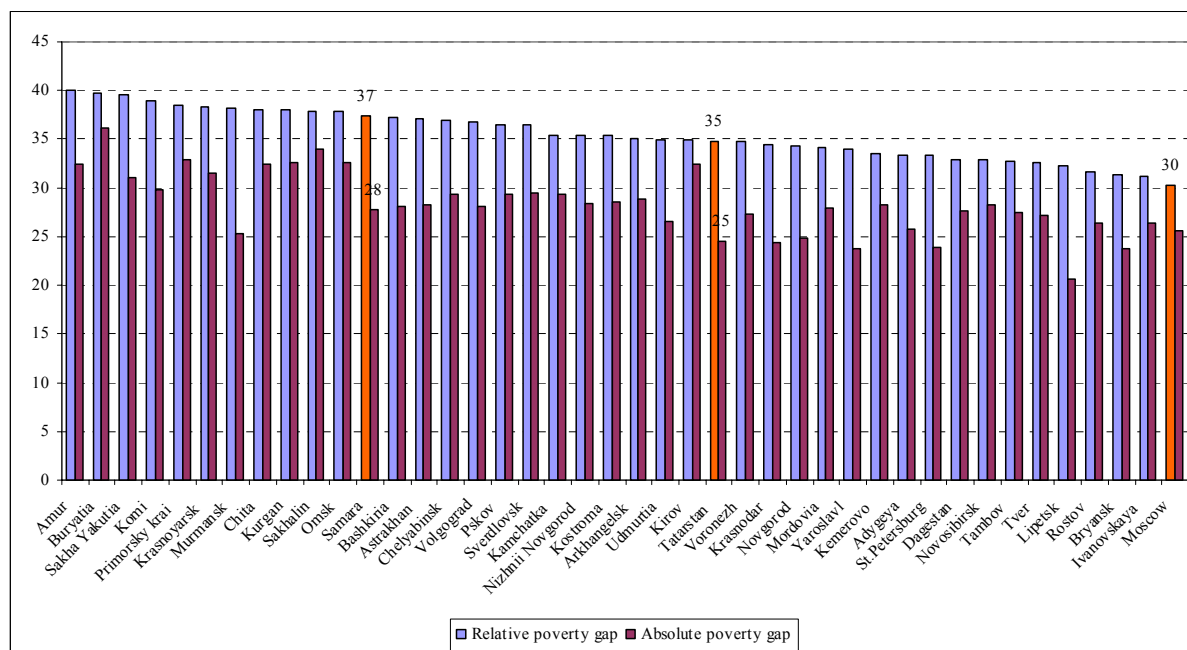
Source: Author's calculations based on NOBUS (2003).

53.   The regional variation in the poverty gap is shown in Figure 11. The relative gap varies from 40% in Amur Oblast and the Republic of Buryatia to 30% in Moscow. The absolute poverty gap is 36% in Buryatia and 21% in Lipetsk Oblast. Samara and Tatarstan show very similar patterns, with relative poverty gaps of 37% and 35%, respectively, and 28% and 25% for the absolute poverty gap.

4. Long-term poverty

54.   Another important dimension of poverty concerns whether it is temporary or permanent. International studies of the incidence and duration of poverty show that the factors determining the two can be quite different, thus resulting in different profiles of temporary and permanent poverty. We study the determinants of long-term poverty by looking at poverty entries and exits using the survival analysis pioneered by Bane and Ellwood (1986). The study utilises the Russian Longitudinal Monitoring Survey (RLMS-HSE) (unbalanced) panel for 1994-2007.

55.   The core methodology of our study is survival (duration) analysis. This approach allows exploiting the features of longitudinal data and permits overcoming the estimation bias associated with the problem of the non-normality of the time-to-event distribution as well as with right-censoring (Kiefer, 1988). The methodology also allows the use of the unbalanced panel, which is beneficial when there is a serious problem with attrition. This was a serious issue in the panel used for this study. The central idea of the approach is to estimate the hazard ratios, defined as the probability that the spell ends at time t conditional on the spell lasting till period t.

56.   In poverty analysis, a spell is the poverty spell when exits from poverty are considered and the non-poverty spell when entries to poverty are studied.

57.   We use the proportional hazard model to analyse the influence of various economic factors on the duration of the spell:

$$\lambda(t, x, \beta, \lambda_0) = \phi(x, \beta)\lambda_0(t)$$

where λ_0 = base hazard function, corresponding to $\phi(\cdot) = 1$, $\phi(x, \beta) = \exp(x'\beta)$, x = vector of explanatory variables, and β s = estimated coefficients. A flexible Cox proportional hazards model, in which the base hazard function is left unspecified, is used.

58.   The vector of explanatory variables x includes several groups of factors: the demographic characteristics of a household; the labour market attachment of adult family members; eligibility for pension transfers as proxied by the share of pensioners in the household; the characteristics of a household's human capital; the settlement type and economic region; and the time period.

59.   Total household income is taken as the measure of welfare. The concept of relative poverty is employed, using a national poverty line of 50% of the median equivalised income, with absolute poverty results provided for comparison.

60.   The Kaplan-Meier estimate is a convenient way of presenting the dependent variable in our study – the survival and hazard functions of staying in poverty or in non-poverty. Figures 12-15 present the Kaplan-Meier estimates of the survival functions for staying in poverty and for staying in non-poverty for the whole time period and for 1994-1998 (before the crisis in the late 1990s) and 2000-2007 (economic growth period) separately. In each case we present results for both relative and absolute poverty, though *we stick to the results for **relative** poverty in the discussion*. Notice that the basic results are robust for both the relative and absolute poverty definitions.

61.   The results show that 42% of families in the sample escape poverty after one year, and another 28% after two years, and yet another 10% after three years (Figure 12, right panel). After four years in poverty the probability of getting out of poverty is more than 75%, and after 7 years it is about 90%. Even so, there is a 7% probability that an average family will stay in poverty for 12 years (the maximum observed period in our sample).

62.   Figure 13 (right panel) presents the estimate of the survival function for staying in non-poverty, *i.e.* of not entering (relative) poverty. It turns out that probability of entering poverty is much flatter than the probability of escaping poverty. In particular, the probability of entering poverty after a year in non-poverty is only 10%, after two years 19%, and after three years 33%[7]. Even after twelve years in non-poverty the probability of entering poverty is 55%, confirming that slightly less than half of the families in the sample never enter poverty.

63.   Hence, about half of the families experienced poverty, but for almost two-thirds of them this was a short period of 1-2 years. About 10% of families experienced what could be called permanent relative poverty.

64.   In addition to the survival estimates for the total samples, the Kaplan-Meier survival functions by periods of decline and growth are estimated. The results, summarised in Figures 14 and 15, suggest that there are significant differences across periods of decline and growth, and hence that macroeconomic conditions shape the exit and entry rates. In particular, the survival functions differ significantly across the two periods, with *both* the *entry to poverty* rate and the *exit from poverty rate* falling during economic upturns. We show in our regression analysis that the pattern holds when controlling for other important

---

[7] Note that those are conditional probabilities of exit after t periods conditionally on staying until period t.

covariates. Hence, in periods of economic growth families tend to have less chance of slipping into poverty, but also less chance of escaping from poverty (if in poverty).

Figure 12. **Survival functions of staying in poverty (absolute poverty left, relative poverty right**
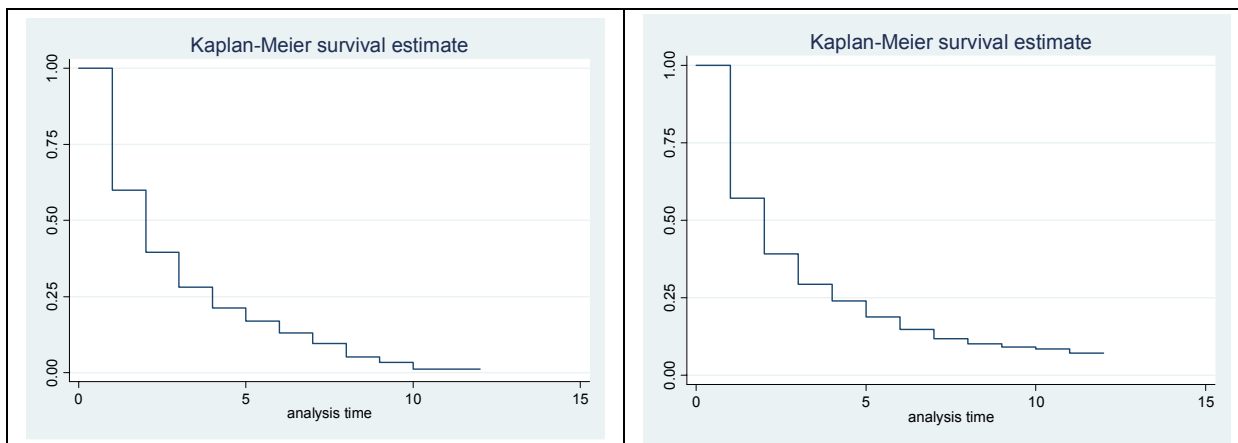

Figure 13. **Survival functions of staying out-of-poverty (absolute poverty left, relative poverty right)**
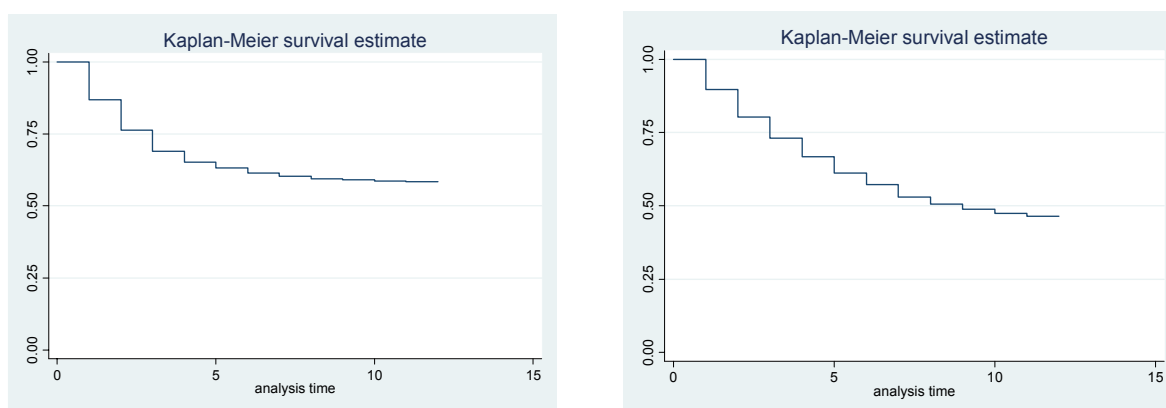

Figure 14. **Survival function of staying in poverty, by period (absolute poverty left, relative poverty right)**
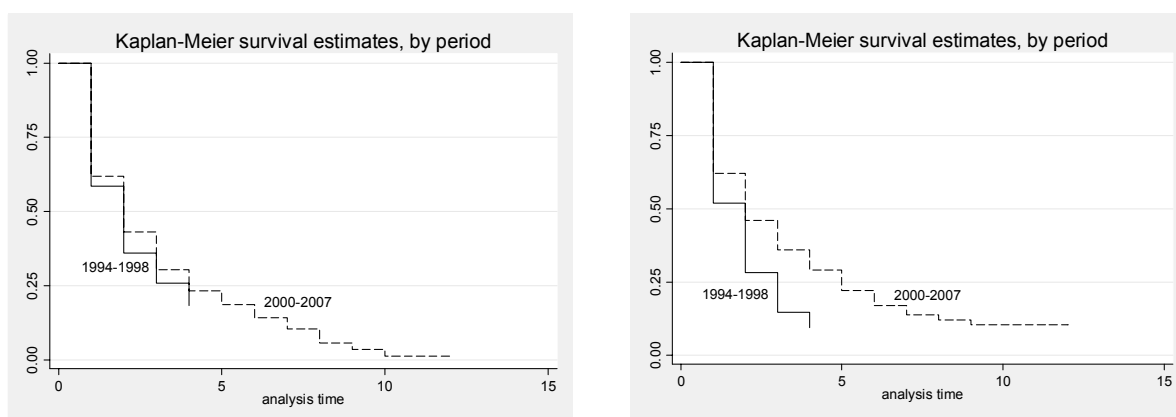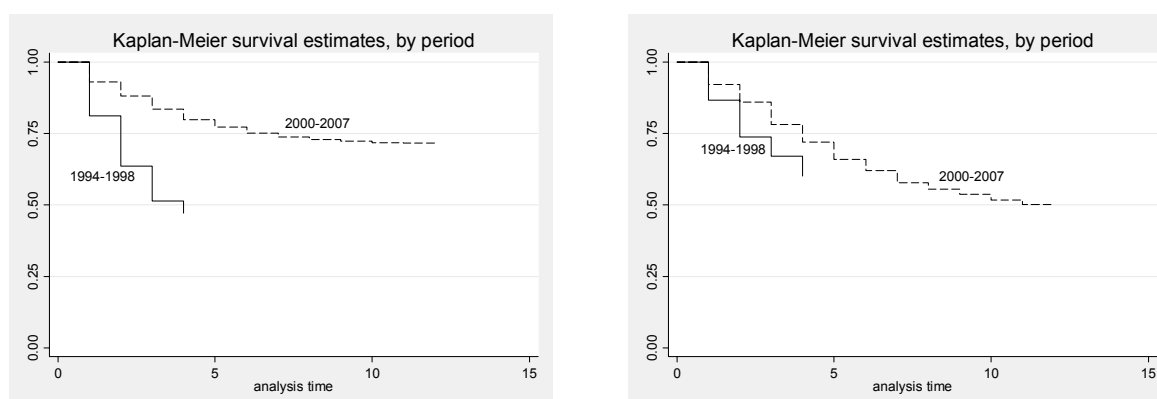
Figure 15.   Survival function of staying out-of-poverty, by period (absolute poverty left, relative poverty right)

65.   To test for the determinants of the hazard rate *from* poverty and *into* poverty, we estimated a Cox proportional hazard model. Several specifications were tried, and the results of applying the relative poverty concept (Table 9) were compared with the results of utilising the absolute poverty concept (Table 10). To take into account the fact that some households experience multiple episodes of poverty and non-poverty, *i.e.* multiple failures in technical terms, the estimates were done with clustering on the initial identification numbers of households. Additionally, stratification on the settlement type was tried in some specifications. This allows the baseline hazards to vary across the two groups, though the estimated coefficients are not allowed to vary.

66.   First, consider the determinants of *getting into relative poverty* (columns 1-3 in Table 9). The results suggest that, controlling for other factors, larger families have less chance of slipping into poverty (when in non-poverty): families with one standard deviation (1 SD) above the mean family size have a lower hazard rate of getting into poverty (30 percentage points). The presence of children, however, increases the chance of getting into poverty, with an increase of 14 percentage points for 1 SD increase in the number of children under age 7, and an increase of 18 percentage points for 1 SD increase in the number of children aged 7-18.

67.   Households headed by retired people – either male or female – have a relatively higher chance of falling into (relative) poverty as compared to adult-male-headed households, with the differential being large as well: 15 percentage points for a retired male as head of household, and 35 percentage points for a retired female as head of household. Notice that this takes into account controlling for the share of pensioners in the family, which counteracts the tendency to fall into poverty. Indeed, the higher the share of pensioners in a household, the lower are the chances of slipping into poverty (by 11 percentage points for 1 SD increase in the pensioner share). This result is in line with the well-documented effect of pension transfers as a safety device against getting into poverty (Spryskov, 2003). Adult-female-headed households have no benefits or losses as compared to male-headed households.

68.   The labour market attachment of adult family members shapes the chances of entering poverty. In particular, a higher share of adults in the labour force decreases the chance of becoming poor by 23 percentage points (in response to 1 SD increase). Unemployment among family members increases the chance of poverty: the hazard rate of slipping into poverty increases by 6 percentage point for 1 SD increase in the share of the unemployed in a household. The share of family members working in the public sector does not affect the chance of becoming poor.

69.   A household's involvement in subsistence farming decreases the probability of entering poverty by 2 percentage points. Note that involvement in subsistence farming is likely to be endogenous to having a higher chance of being poor, so the result should be treated with caution.

70.   The bad health of some household members increases the chance of poverty, while the educational attainment of family members is highly significant in helping to stay out of poverty. In particular, a higher share of adults with a university degree decreases the entry rate into poverty by 28 percentage points for 1 SD. Moreover, a higher share of adults with secondary school increases the chance of getting into poverty only by 6 percentage points for 1 SD.

71.   The chance of an urban family slipping into poverty is only 3 percentage points lower than for a rural family, even after controlling for other covariates. Living in Moscow or St. Petersburg adds even more to the effect. Note that the latter is likely to be related to significantly higher nominal incomes in the metropolitan areas. The influence of economic periods is in line with the economic intuition that economic growth provides increased economic opportunities: economic growth tends to lower the hazard of falling into poverty by 14 percentage points.

72.   Now let us consider the determinants of *getting out of relative poverty* (columns 4-6 in Table 9). The results point to some interesting symmetries and asymmetries in the two processes.

73.   Larger families have a higher chance of getting out of poverty (if in poverty), with the effect being 14 percentage points for 1 SD increase in the family size. The presence of children does not increase or decrease the chance of getting out of poverty.

74.   Households headed by retired males have a slightly higher chance of escaping poverty than do other types of families, though the relevant coefficient is only weakly significant. At the same time, the higher the share of pensioners in the family, the lower are the chances of getting out of poverty, with the effect being 11 percentage points for 1 SD. The finding implies that families with pensioners who slip into (relative) poverty have problems getting out of it, thus increasing their chances of long-term poverty. Adult-female-headed households again have neither benefits nor losses as compared to adult-male-headed households.

75.   Labour market attachment proves to be significant for shaping the chance of getting out of poverty. In particular, households with a higher share of adults in the labour force have less chance of escaping poverty than do those with a lower share (by 6 percentage points for 1 SD change in the share). This implies that a family with a higher labour market attachment that slips into poverty has problems in getting out of poverty, indicating that such families may experience longer poverty spells. Families with unemployed family members, however, are likely to have short periods of poverty, since the hazard rate of getting out of poverty increases by 3 percentage points for 1 SD increase in the share of unemployed in a family.

76.   Families in urban areas tend to have shorter periods of poverty, as the hazard rate of getting out of poverty is 7 percentage points higher for those living in urban areas than for rural citizens. Those from metropolitan areas also have shorter poverty spells.

77.   Economic growth tends to lower the probability of entering poverty, but families that enter poverty or remain in poverty during periods of strong economic growth have a lower chance of escaping poverty, and thus face longer poverty spells on average.

Table 9.   Estimation of Cox proportional hazard model, exit to poverty and exit from poverty. Relative poverty concept.

	Entry to poverty			Exit from poverty		
	cluster ID (1)	cluster ID (2)	cluster ID, strata on urban (3)	cluster ID (5)	cluster ID (6)	cluster ID, strata on urban (7)
	Hazard rate	*Hazard rate*	*Hazard rate*	*Hazard rate*	*Hazard rate*	*Hazard rate*
Family size, number of people in family	-0.203	-0.208	-0.209	0.082	0.1	0.099
	[0.028]***	[0.029]***	[0.029]***	[0.015]***	[0.016]***	[0.016]***
# of kids <7 yrs in HH	0.298	0.291	0.29	0.024	-0.009	-0.009
	[0.049]***	[0.050]***	[0.049]***	[0.030]	[0.031]	[0.031]
# of kids 7-18 yrs in HH	0.267	0.249	0.249	0.016	-0.01	-0.01
	[0.040]***	[0.040]***	[0.040]***	[0.023]	[0.023]	[0.023]
HH headed by adult female	0.064	0.077	0.076	-0.019	-0.005	-0.006
	[0.061]	[0.061]	[0.061]	[0.046]	[0.046]	[0.046]
HH headed by retired male	0.152	0.13	0.129	0.09	0.1	0.098
	[0.065]**	[0.067]*	[0.067]*	[0.055]*	[0.055]*	[0.055]*
HH headed by retired female	0.348	0.345	0.342	0.011	-0.011	-0.015
	[0.070]***	[0.072]***	[0.072]***	[0.058]	[0.059]	[0.059]
Share of adults in LF	-0.416	-0.392	-0.392	-0.094	-0.102	-0.101
	[0.046]***	[0.048]***	[0.048]***	[0.046]**	[0.047]**	[0.047]**
Share of adults unemployed BLS	0.385	0.368	0.366	0.22	0.168	0.168
	[0.110]***	[0.112]***	[0.112]***	[0.074]***	[0.076]**	[0.076]**
Share of adults with bad health	0.259	0.237	0.233	-0.034	-0.074	-0.073
	[0.063]***	[0.063]***	[0.062]***	[0.054]	[0.054]	[0.054]
Share of adult pensioners	-0.214	-0.229	-0.229	-0.213	-0.223	-0.224
	[0.052]***	[0.054]***	[0.054]***	[0.051]***	[0.052]***	[0.052]***
Share of adults in public sector	0.057	0.032	0.031	0.127	0.076	0.076
	[0.056]	[0.056]	[0.056]	[0.051]**	[0.051]	[0.051]
Share of adults with university degree	-0.804	-0.781	-0.778	0.029	0.057	0.056
	[0.076]***	[0.076]***	[0.076]***	[0.056]	[0.056]	[0.056]
Share of adults with secondary school only	0.208	0.215	0.214	-0.12	-0.136	-0.136
	[0.054]***	[0.054]***	[0.054]***	[0.055]**	[0.056]**	[0.056]**
Family involved in subsistence farming	-0.244	-0.22	-0.221	-0.089	-0.065	-0.066
	[0.052]***	[0.052]***	[0.052]***	[0.051]*	[0.051]	[0.051]
1- urban 0- rural	-0.313	-0.303		0.061	0.071	
	[0.038]***	[0.038]***		[0.028]**	[0.028]**	
Moscow & St. Petersburg	-0.978	-0.973	-0.971	0.136	0.169	0.167
	[0.115]***	[0.115]***	[0.115]***	[0.073]*	[0.073]**	[0.073]**
Decline=0 growth=1		-0.352	-0.352		-0.332	-0.332
		[0.040]***	[0.040]***		[0.030]***	[0.030]***
Observations	30838	30838	30838	9023	9023	9023

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 10. Estimation of Cox proportional hazard model, exit to poverty and exit from poverty. Absolute poverty concept.

	Entry to poverty			Exit from poverty		
	cluster ID (1)	cluster ID (2)	cluster ID, strata on urban (3)	cluster ID (5)	cluster ID (6)	cluster ID, strata on urban (7)
	Hazard rate	*Hazard rate*	*Hazard rate*	*Hazard rate*	*Hazard rate*	*Hazard rate*
Family size, number of people in family	-0.013	0.01	0.01	0.04	0.047	0.046
	[0.026]	[0.026]	[0.026]	[0.021]*	[0.022]**	[0.022]**
# of kids <7 yrs in HH	0.143	0.084	0.084	-0.029	-0.047	-0.045
	[0.047]***	[0.047]*	[0.047]*	[0.040]	[0.041]	[0.041]
# of kids 7-18 yrs in HH	0.187	0.115	0.115	-0.064	-0.08	-0.08
	[0.036]***	[0.035]***	[0.035]***	[0.031]**	[0.031]**	[0.031]**
HH headed by adult female	-0.024	0.044	0.044	-0.009	0	0
	[0.068]	[0.065]	[0.065]	[0.052]	[0.053]	[0.053]
HH headed by retired male	0.056	0.071	0.072	0.193	0.221	0.222
	[0.076]	[0.087]	[0.087]	[0.057]***	[0.058]***	[0.058]***
HH headed by retired female	0.245	0.284	0.284	0.262	0.279	0.283
	[0.079]***	[0.090]***	[0.090]***	[0.061]***	[0.062]***	[0.062]***
Share of adults in LF	-0.126	0.038	0.037	-0.044	-0.019	-0.022
	[0.051]**	[0.057]	[0.057]	[0.042]	[0.042]	[0.042]
Share of adults unemployed BLS	0.248	0.196	0.195	0.089	0.068	0.071
	[0.113]**	[0.118]*	[0.117]*	[0.075]	[0.076]	[0.076]
Share of adults with bad health	0.379	0.29	0.288	0.004	-0.017	-0.021
	[0.076]***	[0.075]***	[0.075]***	[0.059]	[0.059]	[0.059]
Share of adult pensioners	-0.377	-0.481	-0.481	-0.07	-0.078	-0.076
	[0.062]***	[0.076]***	[0.076]***	[0.052]	[0.053]	[0.052]
Share of adults in public sector	0.288	0.179	0.178	0.029	0.013	0.018
	[0.058]***	[0.059]***	[0.059]***	[0.048]	[0.048]	[0.048]
Share of adults with university degree	-0.592	-0.569	-0.567	0.08	0.087	0.089
	[0.077]***	[0.079]***	[0.079]***	[0.055]	[0.054]	[0.054]
Share of adults with secondary school only	0.22	0.252	0.252	-0.047	-0.044	-0.044
	[0.061]***	[0.064]***	[0.064]***	[0.050]	[0.050]	[0.050]
Family involved in subsistence farming	0.128	0.072	0.073	-0.147	-0.134	-0.134
	[0.054]**	[0.056]	[0.056]	[0.055]***	[0.055]**	[0.055]**
1- urban 0- rural	-0.275	-0.285		0.066	0.064	
	[0.042]***	[0.043]***		[0.032]**	[0.033]*	
Moscow & St. Petersburg	-0.916	-0.894	-0.896	0.026	0.03	0.024
	[0.136]***	[0.135]***	[0.135]***	[0.089]	[0.090]	[0.089]
Decline=0 growth=1		-1.112	-1.111		-0.14	-0.139
		[0.048]***	[0.048]***		[0.038]***	[0.038]***
Observations	26019	26019	26019	7101	7101	7101

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

78.   Table 10 contains the results of estimates of determinants of getting into poverty and out of poverty when poverty is defined with respect to the absolute poverty line (based on local diets that meet subsistence needs and taking into account regional prices and equivalence scales for family size). The results show that families with children tend to have a higher chance of getting into absolute poverty. Notice that having children older than 7 increases the chance of staying in poverty (lowers the hazard of leaving poverty) and thus prolongs the poverty period. A higher share of pensioners in a household tends to lower the chance of getting into poverty, but has no significant effect on getting out of poverty. At the same time, families headed by a retired male or female (proxy for pensioners living separately) have a higher chance of escaping from absolute poverty, implying that other transfers and subsidies to retirees living on their own help to exit absolute poverty and make the poverty spells shorter. Families in urban areas tend to have less chance of getting into (absolute) poverty and more chance of getting out of poverty. Hence, the category is at a lower risk of long poverty spells. Economic growth almost halves the chance of getting into poverty. At the same time, the chance of escaping poverty is also lower during a period of economic growth, thus putting those still in poverty during the economic upturn at a high risk of prolonged poverty.

79.   Overall, the study of the entries to and exits from poverty provides some important insights into how these take place. In particular, it shows that the two processes have both symmetries and important asymmetries, which are linked to the differences in the duration of poverty spells.

80.   The presence of children increases the chance of getting into poverty but has no effect on the exit from poverty. This is an indication that the poverty spells of families with children are of modest duration. Families of retirees living on their own tend to have a higher chance of getting into poverty, but again are no worse off than those headed by working-age adults with respect to the chance of exiting poverty. Controlling for other factors, pensioners have less chance of getting into poverty, but if in poverty they have a higher chance of staying there longer. Adult-female-headed households again have neither benefits nor losses as compared to adult-male-headed households.

81.   Families with a high share of adults in the labour force that slip into poverty have problems in getting out of poverty, indicating that such families may experience longer poverty spells. Families with unemployed family members are likely to have short periods of poverty, though a higher chance of poverty incidence.

82.   One of the most interesting results is the asymmetry in the influence of economic periods: Economic growth tends to lower the probability of entering poverty, but families that enter or remain in poverty during periods of strong economic growth have a lower chance of escaping poverty. These households often face multiple barriers to participation and require extra support and attention.

5. Conclusions: Labour market development and the role of policy

83.   The analysis confirms that inequality in Russia has remained high throughout the transition period, and even increased slightly in the last five years. The origin of income inequality lies in inequality in earnings from labour income which is higher for all the years in the period except 2009. Inequality originating in the labour market is likely to be subject to a significant redistribution, either directly (via transfers) or implicitly (via subsidies), formally (via public transfers) or informally (via support from relatives). To further address the problem of inequality, one should study the roots of the earnings gap in the labour market, as only part of the gap can be attributed to differences in human capital and skills, while the unexplained component is huge (Nesterova and Sabirianova, 1999). Rents of various sorts are the candidates for a further explanation of inequality in earnings from the labour market.

84.   Poverty measured against both relative and absolute thresholds declined during the last period of high economic growth between 2000 and 2007. Moreover, recent data confirm that poverty in Russia, relative or absolute, is not deep for most of the poor. At the same time, about 5% of poor households have dramatic income gaps of more than 90%. The absolute poverty rate is estimated to be higher among children, while pensioners are relatively better-off.

85.   To be effective, policies to fight poverty need to be based on a clear understanding of its determinants. We show that families with children have a greater chance of being poor. Pension transfers have significantly reduced poverty rates among the elderly. Unemployment increases the chance of poverty. A good education (university degree) is a buffer against poverty. Subsistence farming also reduces the poverty incidence, though it is important to note that causality is likely to run in the opposite direction: people get involved in subsistence farming in order to escape poverty.

86.   Working poverty is still a problem in Russia, even though economic growth helped many of those in this category to get out of poverty. At the same time, the incidence of poverty among those employed is high, and their representation in the group of the poor is sizeable. Moreover, the incidence of poverty among the low-paid (with a wage of less than two-thirds of the regional median wage) is almost thirty percent higher than the average, and they constitute a quarter of those in poverty. The gap has increased even further in recent years. At the same time, the rates indicate that not all the low-paid are in poverty, leaving room for other factors.

87.   Given the diversity of economic situations across regions in Russia, reflected by huge variations in per capita gross regional products, in growth rates, in levels of wages and in unemployment rates, we observe a large variation in poverty rates across regions.

88.   The study of entry into and exit from poverty helps to provide some important insights into the nature of long-term poverty. It confirms that about half of Russian families experienced relative poverty at least once within a period of 14 years, but for almost two-thirds of them this was a short period of 1-2 years. About 10% of families experienced relative poverty in all the periods they were observed by the survey.

89.   The presence of children increases the chance of getting into poverty, but has no effect on exiting from poverty. This is an indication that poverty spells of families with children are of modest duration. Families with retirees living on their own tend to have a higher chance of getting into poverty, but again are no worse off than those headed by working-age adults with respect to the chance of exiting poverty. Controlling for other factors, pensioners have less chance of getting into poverty, but if in poverty a higher chance of staying in poverty longer. Adult-female-headed households again have neither benefits nor losses as compared to adult-male-headed households.

90.   Families with a high share of adults in the labour force that slip into poverty have longer poverty spells. Families with unemployed family members are likely to have short periods of poverty, though a higher chance of poverty incidence. Economic growth tends to lower the probability of entering poverty, but families that enter or remain in poverty during periods of strong economic growth have a lower chance of escaping poverty.

91.   A better education, especially a university degree, is also an effective buffer against poverty, especially in urban areas.

92.   We identified some differences in the determinants of the incidence and duration of poverty: pensioners have less chance of poverty incidence but more chance of long-term poverty if they do slip into poverty. Families with a high share of adults in the labour force that slip into poverty also risk longer poverty spells. Families with unemployed family members are likely to have short periods of poverty but a higher chance of poverty incidence.

93.   Poverty prevention and reduction policies should include several dimensions:

- The high level of labour market attachment of most Russian households should be exploited and low-paid jobs combated. Low wages could be helped by promoting competition in regional and sectoral markets through facilitating entry into regional and local markets.
- Competition could help to diminish rents of various sorts, thus reducing earnings inequality. This could serve to enlarge the group of those who benefit from economic growth.
- Pensions and child benefits are important public transfers. Pensions showed to be a buffer against poverty, while this is still not the case for child benefits as families with children have higher risk of poverty incidence.
- Creating the conditions to accumulate and support human capital (through education and health) is a poverty prevention policy.

94.   Data limitations make the study of many additional interesting aspects of poverty and inequality impossible. This problem may worsen during an economic decline, since there are no adequate instruments to monitor the development of the situation with the necessary frequency. A better use and accessibility of administrative data (on the registered unemployed, on migrants, on recipients of social assistance) could fill some informational gaps.

APPENDIX

Table A1. Selected studies of poverty and welfare in Russia

Study	Data	Poverty/ income measure	Groups identified	Design/ methodology
Commander, Tolstopiatenko and Yemtsov (1999)	RLMS-HSE, two balanced panel samples: 1992-1993 (5,600) and 1994-1997 (2,900).	Income (incl. in-kind) and expenditure; regionally and time deflated. Absolute regional poverty line. Equivalence scale applied.	Chronically poor, never poor, dropped into transient poverty	Poverty and inequality is studied. Income mobility is studied. Transition (between income quintiles) matrices are estimated. Probit is used to identify stable losers and winners.
Lokshin and Popkin (1999)	RLMS-HSE, two panel samples: 1992-1993 and 1994-1996	Total monthly disposable h\h income. Absolute poverty line based on national food basket is used	Persistently poor; persistently rich; never poor; transitory poor (once poor; twice poor; three rounds poor)	Poverty and income dynamics Random effect probit model and pooled probit.
Lokshin and Ravallion (2000)	RLMS-HSE, 1996 and 1998, balanced panel (2,875 households)	Objective (consumption expenditures and incomes) and subjective indicators of h/h and individual welfare. Absolute poverty line (household and region-specific based on region-specific prices and age-gender specific food baskets).	Persistently poor; persistently non-poor; h\hs that fell into poverty; h\hs that escaped poverty	Welfare impact of 1998 crisis is studied; winners and losers are identified; public safety net performance is assessed. Joint distributions of incomes and expenditures as proportion of poverty line are studied. Simulations of distributions are done.
Luttmer (2000)	For Russia: RLMS-HSE, 1994-1998, balanced panel (2,256 h\hs)	Consumption expenditure and income, equivalence scale adjusted. Time-average income or consumption for families is used. Relative poverty measure.	Persistent shocks and transitory shocks are distinguished. Always poor; sometimes poor and never poor are defined.	Inequality and poverty dynamics is studied. Income and expenditure dynamics model is estimated using the method of moments. Instrumented variables approach is applied to estimate the variance of measurement error.
Stillman (2001)	RLMS-HSE, 1994-1998, unbalanced panel (2,335), rural households excluded	Two measures of consumption (total food expenditure and total non-durable expenditure) and income measure are used. PSU and time deflated	Not applicable	Estimation of the average effect of an exogenous transitory change in h/h income on h/h expenditure is attempted. Fixed effects model of h\h consumption is estimated
Mu (2003)	RLMS-HSE, 1994-2000, balanced panel (1,412 households)	Consumption expenditure and net (of endogenous components) income	Not applicable	Consumption smoothing is tested. Estimate consumption equation (in differences) for stratified by assets groups, with and without attrition corrections, by OLS and IV

Study	Data	Poverty/ income measure	Groups identified	Design/ methodology
Spryskov (2003)	RLMS-HSE, 1994-2000, balanced panel (2145 households)	Relative poverty line (half the median) based on household permanent[8] expenditure measure. Equivalence scale is applied.	Non-poor, temporarily poor[9], households with volatile expenditures near the poverty line, and persistently poor[10] are identified.	Transition probabilities Determinants of being in one of the four groups (ordered logit). Reasons for poverty entry and exit (logit and multinomial logit models)
Skoufias (2003)	RLMS-HSE, 1994-2000, Unbalanced panel with restrictions (14,097 observations)	Food consumption, non-food expenditures (excl. durables and luxury goods), gross income (cash + value in-kind)	Non applicable	Consumption smoothing is studied (OLS in differences and IV regressions) as well as the extent and nature of coping with shocks strategies of h\hs (probit models).
Gerry and Li (2004)	RLMS-HSE, 1996-2000, unbalanced panel (9,429 adults)	Consumption as a proxy for welfare (the sum of expenditures on food and non-food items, excl. durables and luxury goods)	Not applicable	Vulnerability (as uninsured exposure to risk) to financial crisis of 1998 (consumption smoothing) is studied. Coping strategies are considered. Quintile regression techniques is used.
Lokshin and Ravallion (2004)	For Russia: RLMS-HSE, 1994-1998, balanced panel (1,970 households)	Household income (cash and in-kind) is calculated	Not applicable	Household income dynamics is studied; existence of poverty traps is tested. Simultaneous income equations are estimated (SPFIML and GMM)
Lokshin and Yemtsov (2004)	RLMS-HSE, 1996 and 1998, balanced panel (2,875 households)	Total h\h expenditure as an objective measure; subjective evaluation of a number of coping strategies Absolute poverty line	Not applicable	Choice of poverty coping strategies is estimated using simultaneous estimation of three equations with binary dependent variables (ML estimations)
Lukyanova (2004)	RLMS-HSE, 1994-2001 unbalanced panel of individuals	Contracted wage indicator is used; relative poverty (with respect to wage) concept is applied.	Not applicable	Earnings inequality is studied. Earnings mobility for the working poor is investigated using probit corrected and not corrected for selection bias.
Poverty assessment report (WB, 2004)	NOBUS, 2003; ОБДХ (Goskomstat) 2002	Consumption (excl. durables); household-specific (equivalence-scale-based) and regionally adjusted absolute poverty lines	Poor and almost poor	Basic poverty indicators were estimated. Poverty profiles, including the risk of becoming poor, were identified.
Mills (2007)	RLMS-HSE, 1994-2003 balanced panel of households	Total monthly disposable h\h income. Absolute poverty line based on national food basket is used	Chronic and transient poor	Determinants of severity of poverty is studied. Tobit procedure corrected for sample attrition bias is used

---

[8] Averaged across the five years under consideration.

[9] With household permanent expenditure being higher than the permanent poverty line and one-two episodes of poverty in particular years.

[10] With household permanent expenditure being lower than the permanent poverty line and poor in the majority of years.

REFERENCES

Bane, M.J. and D.T. Ellwood, 1986. "Slipping Into And Out Of Poverty: The Dynamics of Spells", *Journal Of Human Resources*, pp. 2-23.

Commander, S., A. Tolstopiatenko, and R. Yemtsov, 1999. "Channels of Redistribution: Inequality and Poverty in the Russian Transition", *Economics of Transition,* 7(2), pp. 411-447.

Gerry, C. J. and C. A. Li, 2004. "Coping with Economic Shocks: Consumption Smoothing and the 1998 Russian Financial Crisis." Unpublished mimeo.

Ferrer-i-carbonell, A, and B.M.S van Praag. 2001. "Poverty in Russia." *Journal of Happiness Studies* (Steptember 2000): 147-172.

Forster, M and M. Mira d'Ercole (2005), "Income Distribution and Poverty in OECD Countriesin the Second Half of the 1990s" Social, Employment and Migration Working Paper, No.. 22, OECD, Paris, (www.oecd.org/els/workingpapers).

Kalungina, E., C. Montmarquette and C. Sofer'(2004). "An Analysis of Poverty Persistence in Russia: 1994-2001." Undated Mimeo, Universite de Paris I – Pantheon – Sorbonne.

Kiefer, N., 1988 "Economic Duration Data and Hazard Function", *Journal of Economic Literature*, Vol. XXVI, pp. 646-679.

Klugman, J., J. Micklewright and G. Redmond, 2002. "Poverty in the Transition: Social Expenditures and the Working-Age Poor", *Innocenti Working Paper No.91.*

Lokshin, M. and B. M. Popkin, 1999. "The Emerging Underclass in the Russian Federation: Income Dynamics, 1992-1996", *Economic Development and Cultural Change*, 47(4), pp. 803-829.

Lokshin, M. and R. Yemtsov, 2004. "Household Strategies of Coping with Shocks in Post-crisis Russia", *Review of Development Economics*, 8(1), pp. 15-32.

Luttmer, E. F. P., 2000. "Inequality and Poverty Dynamics in Transition Economies: Disentangling Real Events from Noisy Data." World Bank Draft Mimeo.

Mills, B.F., 2007. "Chronic and Transient Poverty in the Russian Federation", mimeo.

Mroz, T., Popkin, B.M. 1995. Poverty and the Economic Transition in the Russian Federation. Economic Development and Cultural Change 44:1-31

Mu, R., 2003. "Risk, Consumption, Wealth, and Human Capital: Evidence from Russia", NEUDC Conference Paper.

Nesterova, Daria, and Klara Sabirianova (1999) "Investment in Human Capital under Economic Transformation in Russia" *EERC Working Paper Series*.no.4

OECD (2011), *Labour Market and Social Policy Reviews: Russian Federation*, OECD, Paris.

Popkin, B. M., A. K. Baturin, M. Mozhina, and T. Mroz, 1996. "The Russian Federation Subsistence Income Level: The Development of Regional Food Baskets and Other Methodological Improvements." World Bank mimeo.

Rosstat, 2005. Rossiiskii Statisticheskii Ezhegodnik

Skoufias, E., 2003. "Consumption Smoothing in Russia: Evidence from the RLMS." *The Economics of Transition*, 11(1), pp. 67-91.

Spryskov, D., 2003. "Below the Poverty Line: Duration of Poverty in Russia," EERC-Russia Working Paper Series 03-04e, EERC-Russia and CIS.

Stillman, S. and D. Thomas, 2004. "The Effect of Economic Crises on Nutritional Status: Evidence from Russia", IZA Discussion Paper No. 1092.

Stillman, S., 2001. "The Response of Consumption in Russian Households to Economic Shocks." William Davidson Institute Working Paper 412.

UNICEF, *A Decade of Transition* (2001) – Regional monitoring Report 8, UNICEF Innocenti Research Center.

OECD SOCIAL, EMPLOYMENT AND MIGRATION WORKING PAPERS

Most recent releases are:

No. 132 *INCOME DISTRIBUTION AND POVERTY IN RUSSIA* Irinia Denisova (2012)

No. 131 *ELIGIBILITY CRITERIA FOR UNEMPLOYMENT BENEFITS* Danielle Venn (2012)

No. 130 *THE IMPACT OF PUBLICLY PROVIDED SERVICES ON THE DISTRIBUTION OF RESOURCES: REVIEW OF NEW RESULTS AND METHODS* Gerlinde Verbist, Michael Förster and Maria Vaalavuo (2012)

No. 127 *THE LABOUR MARKET INTEGRATION OF IMMIGRANTS AND THEIR CHILDREN IN AUSTRIA* Karolin Krause and Thomas Liebig (2011)

No. 126 *ARE RECENT IMMIGRANTS DIFFERENT? A NEW PROFILE OF IMMIGRANTS IN THE OECD BASED ON DIOC 2005/06* Sarah Widmaier and Jean-Christophe Dumont (2011)

No. 125 *EARNINGS VOLATILITY AND ITS CONSEQUENCES FOR HOUSEHOLDS* Danielle Venn (2011)

No. 124 *CRISIS, RECESSION AND THE WELFARE STATE* Willem Adema, Pauline Fron and Maxime Ladaique (2011)

No. 123 *AGGREGATE EARNINGS AND MACROECONOMIC SHOCKS* Andrea Bassanini (2011)

No. 122 *REDISTRIBUTION POLICY AND INEQUALITY REDUCTION IN OECD COUNTRIES: WHAT HAS CHANGED IN TWO DECADES?* Herwig Immervoll, Linda Richardson (2011)

No. 121 *OVER-QUALIFIED OR UNDER-SKILLED* Glenda Quintini (2011)

No. 120 *RIGHT FOR THE JOB* Glenda Quintini (2011)

No.119 *THE LABOUR MARKET EFFECTS OF UNEMPLOYMENT COMPENSATION IN BRAZIL* Alexander Hijzen (2011)

No. 118 *EARLY MATERNAL EMPLOYMENT AND CHILD DEVELOPMENT IN FIVE OECD COUNTRIES* Maria del Carmen Huerta, Willem Adema, Jennifer Baxter, Miles Corak, Mette Deding, Matthew C. Gray, Wen-Jui Han, Jane Waldfogel (2011)

No. 117 *WHAT DRIVES INFLOWS INTO DISABILITY?EVIDENCE FROM THREE OECD COUNTRIES* Ana Llena-Nozal and Theodora Xenogiani (2011)

No. 116 *COOKING, CARING AND VOLUNTEERING: UNPAID WORK AROUND THE WORLD* Veerle Miranda (2011)

No. 115 *THE ROLE OF SHORT-TIME WORK SCHEMES DURING THE 2008-09 RECESSION* Alexander Hijzen and Danielle Venn (2010)

No. 114 *INTERNATIONAL MIGRANTS IN DEVELOPED, EMERGING AND DEVELOPING COUNTRIES: AN EXTENDED PROFILE* Jean-Christophe Dumont, Gilles Spielvogel and Sarah Widmaier (2010)

No. 113 *ACTIVATION POLICIES IN JAPAN* Nicola Duell, David Grubb, Shruti Singh and Peter Tergeist (2010)

No. 112 *ACTIVATION POLICIES IN SWITZERLAND* Nicola Duell and Peter Tergeist with contributions from Ursula Bazant and Sylvie Cimper (2010)

No. 111 *ECONOMIC DETERMINANTS AND CONSEQUENCES OF CHILD MALTREATMENT* Lawrence M. Berger, Jane Waldfogel (forthcoming)

No. 110   *DISTRIBUTIONAL CONSEQUENCES OF LABOR DEMAND ADJUSTMENTS TO A DOWNTURN: A MODEL-BASED APPROACH WITH APPLICATION TO GERMANY 2008-09*
Herwig Immervoll, Olivier Bargain, Andreas Peichl, Sebastian Siegloch (2010)

No. 109   *DECOMPOSING NOTIONAL DEFINED-CONTRIBUTION PENSIONS: EXPERIENCE OF OECD COUNTRIES' REFORMS*
Edward Whitehouse (2010)

No. 108   *EARNINGS OF MEN AND WOMEN WORKING IN THE PRIVATE SECTOR: ENRICHED DATA FOR PENSIONS AND TAX-BENEFIT MODELING*
Anna Cristina D'Addio and Herwig Immervoll (2010)

No. 107   *INSTITUTIONAL DETERMINANTS OF WORKER FLOWS: A CROSS-COUNTRY/CROSS-INDUSTRY APPROACH*
Andrea Bassanini, Andrea Garnero, Pascal Marianna, Sebastien Martin (2010)

No. 106   *RISING YOUTH UNEMPLOYMENT DURING THE CRISIS: HOW TO PREVENT NEGATIVE LONG-TERM CONSEQUENCES ON A GENERATION?*
Stefano Scarpetta, Anne Sonnet and Thomas Manfredi (2010)

No. 105   *TRENDS IN PENSION ELIGIBILITY AGES AND LIVE EXPECTANCY, 1950-2050*
Rafal Chomik and Edward Whitehouse (2010)

No. 104   *ISRAELI CHILD POLICY AND OUTCOMES*
John Gal, Mimi Ajzenstadt, Asher Ben-Arieh, Roni Holler and Nadine Zielinsky (2010)

No. 103   *REFORMING POLICIES ON FOREIGN WORKERS IN ISRAEL*
Adriana Kemp (2010)

No. 102   *LABOUR MARKET AND SOCIO-ECONOMIC OUTCOMES OF THE ARAB-ISRAELI POPULATION*
Jack Habib, Judith King, Asaf Ben Shoham, Abraham Wolde-Tsadick and Karen Lasky (2010)

No. 101   *TRENDS IN SOUTH AFRICAN INCOME DISTRIBUTION AND POVERTY SINCE THE FALL OF APARTHEID*
Murray Leibbrandt, Ingrid Woolard, Arden Finn and Jonathan Argent (2010)

No. 100   *MINIMUM-INCOME BENEFITS IN OECD COUNTRIES: POLICY DESIGN, EFFECTIVENESS AND CHALLENGES*
Herwig Immervoll (2009)

No. 99   *HAPPINESS AND AGE CYCLES – RETURN TO START…? ON THE FUNCTIONAL RELATIONSHIP BETWEEN SUBJECTIVE WELL-BEING AND AGE*
Justina A.V. Fischer (2009)

No. 98   *ACTIVATION POLICIES IN FINLAND*
Nicola Duell, David Grubb and Shruti Singh (2009)

No. 97   *CHILDREN OF IMMIGRANTS IN THE LABOUR MARKETS OF EU AND OECD COUNTRIES: AN OVERVIEW*
Thomas Liebig and Sarah Widmaier (2009)

A full list of Social, Employment and Migration Working Papers is available at *www.oecd.org/els/workingpapers*.

Other series of working papers available from the OECD include: *OECD Health Working Papers*.

<u>RECENT RELATED OECD PUBLICATIONS:</u>

SICK ON THE JOB: Myths and Realities about Mental Health and Work (2011), www.oecd.org/els/disability

DIVIDED WE STAND: Why Inequality Keeps Rising (2011), www.oecd.org/els/social/inequality

EQUAL OPPORTUNITIES? The Labour Market Integration of the Children of Immigrants (2010), *via OECD Bookshop*

OECD REVIEWS OF LABOUR MARKET AND SOCIAL POLICIES: ESTONIA (2010), *www.oecd.org/els/estonia2010*

JOBS FOR YOUTH: GREECE (2010), *www.oecd.org/employment/youth*

JOBS FOR YOUTH: DENMARK (2010), *www.oecd.org/employment/youth*

OECD REVIEWS OF LABOUR MARKET AND SOCIAL POLICIES: ISRAEL (2010), www.oecd.org/els/israel2010*

JOBS FOR YOUTH: UNITED STATES (2009), *www.oecd.org/employment/youth*

JOBS FOR YOUTH: POLAND (2009), *www.oecd.org/employment/youth*

OECD EMPLOYMENT OUTLOOK: Tackling the Jobs Crisis (2009), *www.oecd.org/els/employment/outlook*

DOING BETTER FOR CHILDREN (2009), *www.oecd.org/els/social/childwellbeing*

SOCIETY AT A GLANCE – ASIA/PACIFIC EDITION (2009), *www.oecd.org/els/social/indicators/asia*

OECD REVIEWS OF LABOUR MARKET AND SOCIAL POLICIES: SLOVENIA (2009), *www.oecd.org/els/slovenia2009*

INTERNATIONAL MIGRATION OUTLOOK: SOPEMI (2010) *www.oecd.org/els/migration/imo*

PENSIONS AT A GLANCE 2009: Retirement-Income Systems in OECD Countries (2009), www.oecd.org/els/social/pensions/PAG*

JOBS FOR YOUTH: FRANCE (2009), *www.oecd.org/employment/youth*

SOCIETY AT A GLANCE 2009 – OECD Social Indicators (2009), *www.oecd.org/els/social/indicators/SAG*

JOBS FOR YOUTH: AUSTRALIA (2009), *www.oecd.org/employment/youth*

OECD REVIEWS OF LABOUR MARKET AND SOCIAL POLICIES: CHILE (2009), *www.oecd.org/els/chile2009*

PENSIONS AT A GLANCE – SPECIAL EDITION: ASIA/PACIFIC (2009), *www.oecd.org/els/social/pensions/PAG*

SICKNESS, DISABILITY AND WORK: BREAKING THE BARRIERS (VOL. 3) – DENMARK, FINLAND, IRELAND AND THE NETHERLANDS (2008), *www.oecd.org/els/disability*

GROWING UNEQUAL? Income Distribution and Poverty in OECD Countries (2008), *www.oecd.org/els/social/inequality*

JOBS FOR YOUTH: JAPAN (2008), *www.oecd.org/employment/youth*

JOBS FOR YOUTH: NORWAY (2008), *www.oecd.org/employment/youth*

JOBS FOR YOUTH: UNITED KINGDOM (2008), *www.oecd.org/employment/youth*

JOBS FOR YOUTH: CANADA (2008), *www.oecd.org/employment/youth*

JOBS FOR YOUTH: NEW ZEALAND (2008), *www.oecd.org/employment/youth*

JOBS FOR YOUTH: NETHERLANDS (2008), *www.oecd.org/employment/youth*

For a full list, consult the OECD online Bookshop at *www.oecd.org/bookshop*.