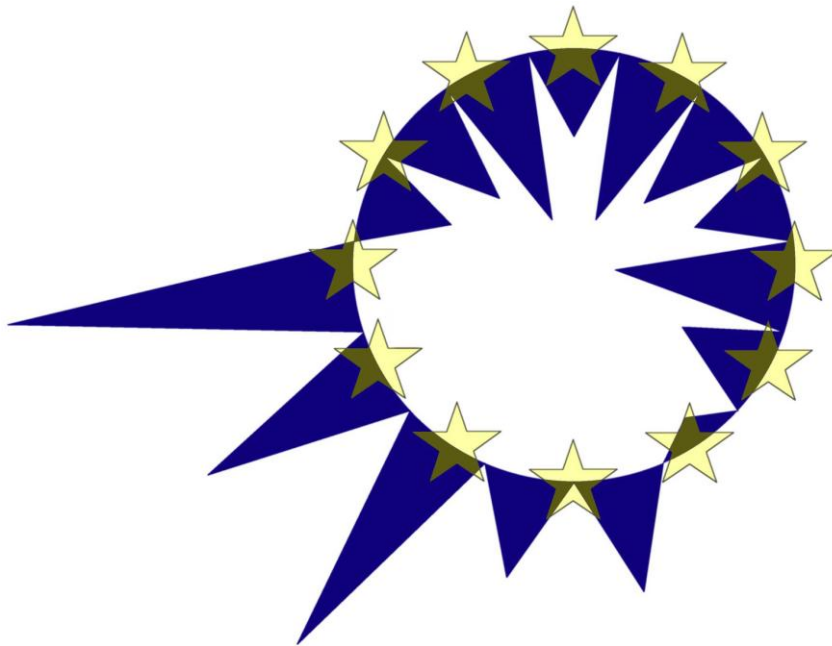


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CONSTRUCTING THE TAX-BENEFIT MICRO SIMULATION MODEL FOR RUSSIA – RUSMOD

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CONSTRUCTING THE TAX-BENEFIT MICRO SIMULATION MODEL FOR RUSSIA – RUSMOD¹

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Abstract

The Russian tax-benefit system consists of numerous types of support available to a large circle of beneficiaries; they are regulated by a number of legislative acts that focus on certain types of assistance rather than on vulnerable groups. In addition, the decentralization reform of social protection carried out in 2005 motivated many regional governments to implement their own social programs that differ in terms of design and generosity. So far, however, little is known about the impact of the tax-benefit policies on income distribution and poverty in Russia. This paper describes the construction of a tax-benefit microsimulation model for Russia (RUSMOD) which is based upon the EUROMOD platform. RUSMOD simulates the eligibility and receipt of most of the existing monetary policies at the federal and regional levels and assesses their potential redistributive effect. This paper aims to provide necessary background material on the construction of the model to anyone wishing to work with RUSMOD.

JEL Classification: I32; I38; H24; D31

Keywords: tax-benefit policy; microsimulation; regional policies; Russia

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¹ RUSMOD has been constructed using EUROMOD version F5.37 as a platform. EUROMOD is continually being improved and updated and the results presented here represent the best available at the time of writing. Any remaining errors, results produced, interpretations or views presented are the authors' responsibility.

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1. 1. OVERVIEW OF SOCIAL PROTECTION AND TAX SYSTEM

1.1 1.1 Basic figures and facts about the system

- The social protection in Russia is funded from the Consolidated Budget (Federal, Regional and Municipal) and extra-budgetary funds (Pension Fund, Social Insurance Fund, Federal and Territorial Funds of Mandatory Health Insurance). In total, the contribution of the Consolidated Budget amounts to over a half of the total social protection spending. After the decentralization reform carried out in 2005, the budgetary spending on social protection is mainly administered at the regional level.
- The administration of almost all social protection programs, except for public pensions, insurance allowances and unemployment benefit, is carried out at the municipal level, through Municipal departments of social protection. The latter comprise the Payment Offices that are responsible for delivery of cash allowances and the Service Centres, responsible for provision of home-based social care for children, the elderly and the disabled. All federal payments (e.g. pensions, unified social payment, maternity capital, etc.) are delivered by the local offices of the Pension Fund.
- The revenues of the Consolidated Budget of the RF are derived from general taxes (federal, regional and local). The revenues of the Federal and Territorial Funds of Mandatory Health Insurance are generated by Social insurance contributions paid by employers. The revenues of the Pension Fund and Social Insurance Fund are partly generated by Social insurance contributions, and partly – by transfers from the Federal Budget to cover the spending on persons that do not qualify for social insurance (e.g. child care allowance up to 1.5 years for non-working women, social pension, etc.), as well as the budget deficit of the Pension Fund.
- The tax system is largely a unified, national system consisting of Social insurance contributions (former Unified social tax), Income tax, Value added tax, Tax on mineral resource extraction, Corporate profit tax, Excise tax. There are a few taxes set by regional and local governments (Corporate property tax, Land tax, Vehicle tax, Tax on gambling businesses) but their share in overall taxation is small.
- Pensions and social insurance allowances are regulated and financed at the federal level. After the decentralization of social protection in 2005 the majority of non-insurance-based benefits and social services has become the mandate of the subjects of the RF. Regional authorities set the size and eligibility criteria within the limits established by the federal legislation. Few municipalities provide their own local social assistance benefits.
- Social benefits and pensions are usually assessed and delivered on a monthly basis. Amounts are referred to in monthly terms.
- The fiscal year is 1 January - 31 December. The tax system generally changes in 1 January each year. Main benefit changes happen at the same time, however they may also be implemented in other times of year (e.g. the indexation of pension benefits can be held on a quarterly basis if the inflation rate is 6% or higher).
- State pension age is 55 years for women and 60 years for men. Both early retirement and postponement is possible, also various occupational pensions exist.
- Children are subject to the obligation to attend school from age 7 and until they acquire basic education (9 years).

- Dependent children for family benefits are defined as aged under 16, or under 18 if they are enrolled in daytime study. For tax deductions, dependent children are those aged under 18 or under 24 if enrolled in daytime study.
- For benefit purposes single parents are the parents of resident dependent children whose birth registration certificate does not have an entry concerning the father or an entry has been made on the basis of a statement by the mother or whose parent has been declared to be a fugitive.
- The income tax system is an individual system. There are some income sources on which income tax is immediately withheld when they are paid out (e.g. wages); final tax liability is based on the tax report after the tax year has ended (taking into account tax already withheld). Pensions and social benefits are not taxable.
- Standard income tax deductions are provided on a monthly basis, but eligibility is based on cumulative annual income. In order to make use of the social deductions these have to be declared in the following year (by 31st March) when filing the tax report.
- The child allowance up to 16(18) years assesses entitlement according to monthly income of the parents averaged for the last 3 months. The income-tested state social assistance and housing subsidy assess entitlement according to monthly household income averaged for the last 3 and 6 months, respectively. Household consists of persons living together and sharing their income and expenditures.
- The income test is usually carried out by means of comparing income of an applicant with the cost of an official poverty line. It is referred to as the Subsistence Minimum Level and equals the cost of a minimum basket of goods and services. The composition of a basket is defined by a normative method for three demographic groups (children under 16 years, men and women of active working age, men and women of pension age) and estimated quarterly for each region and for Russia as a whole.
- Russian law mandates a minimum monthly wage applied for regulation of wages, unemployment benefit and insurance-based allowances due to temporary incapacity and maternity. It is updated on an ad-hoc basis in connection with the price growth and the cost of living². According to the Labour Code (Article 133) the minimum wage cannot be lower than the cost of a poverty line of a working age person. However, this norm is violated. In 2010 it was equal to 70% of the subsistence minimum level of a working age person.
- In some areas of the North and Far East of Russia a special coefficient is applied to adjust wages for the cost of living in extreme climate conditions. The sizes of state pensions and some other cash allowances may be adjusted by this coefficient.
- Tax breaks and most cash allowances are changed in ad hoc manner. Labour pensions are indexed to inflation and average wage growth rates. Social pensions are indexed to inflation rates and changes in the cost of a pensioner's poverty line. All benefits that are financed from the Federal Budget are annually indexed to inflation.

² The latest adjustment was carried out in June 2011 when the minimum wage was set at the level of 4,611 Rubles. Before that the minimum wage was not updated for 2 years (the last increase from 2,300 to 4,300 Rubles had been made in January 2009).

- Social insurance contributions are payroll taxes and are paid by employers, although all tax payments are linked to individuals when calculating pensions, sickness or maternity allowances.

The structure of funding and delivery of social protection at the federal and regional level is summarized in **Annex Figure 1** and **Figure 2**. Other important figures about the tax-benefit system are given in **Tables 1-3**.

Table 1.1 – Basic figures (end of year)

Year:	Pop	Pop (0-17 years)*	Pop (65+ years)	Life expect .	Fertility rate	Unemp. Rate (ILO)	CPI	Exch. Rate	PPP (household consumption)	GDP per head
	Mln	%	%	Years	(number of children per 1 woman)	% of economically active pop (15-72 years)	% to previous year	Rubles per 1 Euro	Rubles per 1 Euro	PPP USD
2005	143.5	20.3	13.7	65.3	1.3	7.1	110.9	34.2	13.2	11 856
2006	142.8	19.6	13.9	66.6	1.3	6.7	109.0	34.7	n/a	14 952
2007	142.2	19.0	14.0	67.5	1.4	5.7	111.9	35.9	n/a	16 749
2008	142.0	18.6	13.8	67.9	1.5	7.0	113.3	41.4	16.2	20 275
2009	141.9	18.4	13.3	68.7	1.5	8.4	108.8	43.4	n/a	18 869
2010	143.0	18.2	12.8	n/a	n/a	7.5	108.8	40.3	n/a	19 674

Sources:

Federal State Statistics Service (Rosstat): on-line database at <http://www.gks.ru/>

Central Bank of Russia: on-line database at <http://www.cbr.ru/statistics/>

*Population below 18 years estimates are from the periodic reports of the RF to the UN Child Rights Committee

Table 1.2 – Tax-benefit system and government budget, as % of GDP

	Total general government revenue	Total tax receipts	Total general government expenditure	Social expenditure including housing*	Social expenditure**	Social protection expenditure**
2005	39.7	29.0	31.6	19.0	17.3	13.5
2006	39.5	27.7	31.1	19.2	17.0	13.1
2007	40.2	29.5	34.2	20.8	17.7	13.6

2008	38.8	27.1	33.9	20.0	17.8	13.8
2009	35.1	24.4	41.4	24.5	22.2	17.6
2010	35.7	25.2	39.2	24.9	23.0	18.8

Sources:

Federal State Statistics Service (Rosstat): on-line database at <http://www.gks.ru/>

Notes:

* housing, education, healthcare, social protection, culture and arts

**education, healthcare, social protection, culture and arts

***pensions, unemployment, social insurance, social assistance, social services and healthcare

Table 1.3 - Taxation, as % of total tax receipts

	Personal income tax	Corporate income tax	Taxes on natural resource extraction	Social security contributions		Indirect Taxes	Other taxes
				Employees	Employers		
2005	11.3	21.3	14.8	0.0	18.8	27.6	6.1
2006	12.5	22.4	15.9	0.0	19.3	23.9	6.0
2007	12.9	22.1	12.6	0.0	20.2	26.3	5.9
2008	14.9	22.4	15.6	0.0	18.9	22.2	6.1
2009	17.6	13.4	11.4	0.0	24.3	25.3	7.9
2010	15.8	15.6	12.7	0.0	21.8	26.2	7.9

Source: Federal State Statistics Service (Rosstat): on-line database at <http://www.gks.ru/>

1.2 1.2. Social protection benefits

Below social benefits are classified by function. Within each section they may be further classified as cash or in kind, insurance or non-contributory, categorical or means-tested. We start with the poverty definition which is used throughout the system.

1.2.1 1.2.1 Poverty definition

Russian social protection system operates on the basis of a national definition of poverty, or the Subsistence Minimum Level (SML)³. This is an expertly defined indicator – a cash amount that is necessary to buy a minimum consumer basket of goods and services in order to maintain a person's health and vital activity. Persons and households whose per capita income is below this value are considered to be poor.

³ Federal Law of 24.10.1997 No 134-FL 'On subsistence minimum level in the Russian Federation'.

The value of SML is calculated using a normative method for three socio-demographic groups – children up to 16 years, persons of active working age (men of 16-59 years and women of 16-54 years) and persons of pension age (men of 60+ years and women of 55+ years). It is set quarterly in all regions and for Russia as a whole on the basis of a composition of a consumer basket and the federal statistics agency data about the price levels.

The composition of a consumer basket is revised at least once in 5 years (the last changes were introduced in 2006). *Minimum sets of food products* are developed by the Institute of Nourishment of the Russian Academy of Medical Sciences based on recommendations of the World Health Organization. *Minimum sets of consumer goods* are derived from the Household Budgetary Survey data about actual consumption of low-income households. *Minimum sets of services, taxes and other compulsory payments* comprise the cost of rent and utilities, public transportation, other types of services (in particular, cultural activities) and (for people of active working age) costs of taxes and other compulsory payments. Costs of health care, education and personal social services are not included, since it is considered that they are free at the point of use.

The value of SML for Russia as a whole serves as a basis to set the minimum wage, sizes of federal supplements to pension, scholarships and some other federal allowances. The value of regional SML serves as a basis to set sizes of regional supplements to pension, state social assistance and some other regional social benefits. The regional SML is used to define eligibility for all means-tested allowances.

1.2.2 Pensions

Pensions are the most important element of Russia's social protection system⁴. The main objectives of pensions are to prevent poverty among pensioners and to replace earnings lost due to old age, disability, death of a breadwinner, etc. In 2002 the major pension reform was launched to substitute a mandatory and nearly universal⁵ defined-benefit Pay As You Go (PAYG) system⁶ by a three-pillar pension system:

- A 'first pillar' or 'unfunded pension system', based on PAYG principle, provides retirees with some percentage of their former salaries, however defined, per year of contribution. Russia adopted a variant of PAYG systems called 'notional accounts' in which each contribution made by individual workers is tracked in an individual account together with hypothetical interest credited to the contributions. Upon retirement, the balance in this hypothetical or notional account is converted into a pension. In addition, Russia has a 'zero pillar' or general revenue-financed benefits for uninsured pensioners (disabled, children-orphan etc.), referred to as 'social pensions'.

⁴ The main legislative and regulatory documents are as follows: Federal Law of 15.12.2001 No 167-FL 'On mandatory pension insurance in the Russian Federation'; Federal Law of 24.07.2002 'On investment of assets for financing the funded element of the labour pension in the Russian Federation'; Federal Law of 17.12.2001 No 173-FL 'On labour pensions in the RF'; Federal Law of 15.12.2001 No 166-FL 'On public pension provision in the RF'; Federal law of 30.04.2008 No 56-FL 'On additional insurance premiums for the funded part of the labour pension and the state support for formation of pension savings'.

⁵ There was a limited set of employer-based occupational and personal private pension programs, that are not mandatory and too far from universal.

⁶ PAYG pension system is the one where contributions paid by current workers finance pensions for current retirees, and pensions for today's workers will be paid by contributions from future workers.

- A ‘second pillar’ or ‘funded system’ differs from the first pillar in that worker’s contributions are kept in individual savings accounts and actually invested in a variety of financial assets, rather than being used to finance current pensions. The contributions plus interest earned on each account are used to provide a pension for that particular individual when the individual reaches the statutory pension age.
- Finally, there is a ‘third pillar’, mechanisms for individuals to save additional money toward a better pension on a voluntary basis.

Zero pillar (social pensions) is financed by general revenues. First pillar is financed by employer contributions to the extra-budgetary Pension Fund. Second and third pillars are financed by employer and employee contributions and by interest earnings on these contributions. An important issue for any radical pension reform is the way of financing transition. The second pillar contributions are carved out of the overall pension contributions so that less revenue goes to the PAYG system to finance the current pensioners. The Russia’s pension reform was designed to keep relatively low differentiation of pension benefits⁷ and introduce a funded pillar gradually over a long period of time. However, given that the Pension Fund is running deficit even with its full pension contributions, carving out a portion results in even bigger deficits for the first pillar, to be financed by general revenue⁸. Since 2005 the Pension Fund was running a 30% deficit that reached 45% in 2009-2010 and was reduced to 18% in 2011⁹ due to an increase in pension contribution rates. Given the cut in social contributions which is scheduled for 2012-2013, the Ministry of Finance predicts that the financial sustainability of the Russian pension system is unlikely to be achieved without raising the pension age.

The new system distinguishes between two major types of state pensions: **labour pensions** and **public provision pensions**. In the former, benefits are earned through prior contributions over the entire working life. The latter are provided to people with insufficient or no labour record or to some special occupational groups. Typically an individual can claim only one type of pension, but in some cases a public provision pension can be paid together with an old age pension¹⁰. All state pensions are not taxable and people are allowed to work while getting pension benefits.

Labour pensions comprise **old age**, **disability** and **survivor’s pensions**. Old age pension is calculated according to a formula, which consists of two additive elements: an *insurance*

⁷ Benefits for current pensioners and pension rights for those who contributed to the prior system were recalculated according to the new legislation so that a person’s salary was taken into account only in part not exceeding 120% of an average national salary. Noteworthy, for current pensioners a size of benefit after recalculation should not be lower than the one before the reform.

⁸ Workers born before 1967 are excluded from participating in the funded pillar, all their pension contributions are transferred to the insurance element of the labour pension. Those born after 1966 paid 3% of their earnings to the funded pillar in 2002-2003, 4% in 2004-2007 and 6% starting from 2008. Respectively, their contributions to the insurance element of the labour pension are equal to 14% or less depending on the age and earnings of the contributor. In total the maximum rate of contribution to cover all elements of the labour pension amounted to 28% in 2002-2004. These were followed by the rate cuts (20% in 2005-2010) that had been intended to reduce labor costs and to foster formal labor market participation, but those cuts were reversed (back to 26% in 2011) in light of the crisis and need for revenue.

⁹ Calculated based on the FSSS data (‘Social situation and living standards’, 2009, p. 173)

¹⁰ E.g. public servants, disabled due to the military accident, widows of the killed military.

element and a *funded element*. The insurance element, in its turn consists of a *fixed basic element*¹¹ and a *defined-contribution PAYG* or *notional defined-contribution element*¹². The contribution to the funded element is compulsory for people born after 1966, however they can be made/increased on a voluntary basis through the Program of the state co-funding of pension launched in 2009¹³. Disability and survivor's pensions consist of the first element only (funded element is not envisaged), including the fixed basic element¹⁴ (these types of pensions are considered in detail in the relevant sections). The possibility of retirement is open to all residents of Russia with a contribution period of at least 5 years, who have attained the statutory pension age (55 years for women; 60 years for men). Disability pension can be claimed as soon as a person becomes disabled. Some narrowly defined categories of citizens with merits before the state (such as WWII veterans) are entitled to a higher size of the labour pension. For specific occupational and social groups the labour pension is available before normal retirement age, given that they have accumulated a required length of service, sometimes irrespectively of age of the worker¹⁵.

Public provision pensions comprise **pensions for the length of service** for public servants and the military, aviators and astronauts; **old age pensions** for victims of nuclear or technological accidents, **disability pensions** for the military, WWII participants, victims of nuclear or technological accidents, astronauts; **survivor's pensions** for the family members of the military, victims of nuclear or technological accidents, astronauts; and **social pensions** or the minimum pension benefits for those who do not have a minimum necessary length of service to be eligible for the labour pension. This comprises all men aged 65 and more and women aged 60 and more; the disabled, including the disabled children; children-orphanes studying full-time up to 23 years; representatives of the small ethnic groups of the North upon reaching the age 55 for men and 50 for women. Sizes of the social pensions are differentiated by group. Sizes of other public provision pensions can be fixed as a percentage of former earnings (e.g. for federal officials) or as a size of the social pension multiplied by a coefficient (e.g. for people who suffered from radiation). For people living in the Far North the calculated sizes of pensions are multiplied by a special coefficient.

The **insurance element of labour pension** (including the fixed basic element) is indexed by inflation as follows:

¹¹ In February 2011 the fixed basic element of the old age pension was equal to 2,963 Rubles per month. Individuals aged 80 years and more, individuals with dependents, and individuals, who had worked in the Far North are entitled to a higher size of the basic element.

¹² This element is linked to the insurance contributions paid after 1 January 2002 and the converted pension rights accumulated before 2002.

¹³ If an individual transfers at least 2,000 Rubles annually to his pension account (apart from compulsory pension insurance) the state doubles this payment. However, the upper annual payment by the state should not exceed 12,000 Rubles, the maximum period of co-funding is 10 years. All people are eligible, including those who are born before 1967 and thus are excluded from the funded pillar.

¹⁴ A higher size of the basic element of the disability pension is provided for people with severe disability, dependents and for those who had worked in the Far North. Basic element of the survivor's pension is set at a higher size for orphans who had lost both parents and for people living in the Far North.

¹⁵ Most common examples of privileged occupational groups include those who had worked in the Far North and in hard and hazardous conditions, as well as sportsmen, school teachers, health care workers, etc. Privileged social groups include women with 5 and more children, parents who took care of disabled children, etc.

- quarterly (on February 1, May 1, August 1 and November 1) if the price growth in each quarter was 6% and more;
- every six months (on February 1 and August 1) if the price growth for the six month was 6% and more;
- once a year (on February 1) if the price growth for the six months was below 6%;
- if an annual growth of the average monthly wage exceeds the inflation rate, on April 1 of the following year the size of the pension is additionally indexed by a difference between the annual wage growth rate and inflation rate, given that this additional increase does not exceed a coefficient of growth of incomes of the Pension Fund earmarked for the payment of the insurance element of the labour pension, as per one pensioner.

Additional ad hoc increases are common. For example, in order to reduce income losses of the elderly after the monetization of privileges in 2005, the Government carried out a series of extraordinary increases of a basic element of the insurance pension, which initiated the long period of the budget deficit of the Pension Fund. In 2010 the Pension Fund has carried out a valorization (reevaluation) of pension rights acquired before the pension reform of 2002, which considerably raised the average old age pension.

The **funded element of old age pension** is subject to annual indexation on July 1 of the year that follows the year of allocation or recalculation of the pension, taking into account investment income of the pension funds.

The **social pension** is indexed annually (on April 1) by inflation. If the growth of the cost of a pensioner's poverty line exceeds inflation, the social pension is indexed additionally (on July 1) by the difference between the annual growth rate of the pensioner's poverty line and the annual inflation rate.

By the end of 2010 there were 39.706 million of pensioners in Russia, including 36.894 million people entitled to labour pensions, 2.762 thousand people entitled to social pensions and 49 thousand people entitled to pensions for public service. In 2010 3.3 million people participated in the Program of the state co-funding of pensions. A minor fraction of pensioners were in receipt of non-state pensions (3.4% in 2010). 31% of all pensioners were working. On average in the economy there were 1.72 employed per one pensioner. Originally, the Russian pension reform was aimed at creating private pension funds and introducing the effective insurance mechanism into the pension system. However, the accelerated growth of a basic element of the insurance pension disturbs the balance between a basic and a defined-contribution element of the labour pension, thus working against the insurance principles in the pension system. Full assessment of the efficiency of the funded system will only be possible after 2022. However based on the long-term forecasts of the Pension Fund the funded element of the pension will amount to 8-15% of the average pension, which makes it unattractive for future pensioners. The growth of a replacement ratio is expected to be achieved through voluntary pension insurance, while the main objectives of the pension system is to ensure that the size of the state pension is above the pensioner's poverty line and the differentiation by pension size is low. Since 2006 the average pension has been growing in real terms. In 2010 an average pension was equal to 35.7% of average earnings, while the target set by the government is 40% (a replacement ratio characteristic for the 1980s). The average social (minimum) pension was equal to the pensioner's poverty line.

1.2.3 1.2.3 Unemployment

A public employment service (currently the Federal Service on Labour and Employment) emerged in Russia in the early 1990s, in response to massive labor market adjustments in the economy associated with restructuring and privatization of state-owned enterprises. It is responsible for all aspects of employment services and programs – registering the unemployed, paying unemployment benefits, providing guidance and counseling to job seekers, and coming up with the Active labour market programs (ALMPs) like training, wage subsidies or public works.

According to the Russian labour legislation¹⁶ there are several types of social support guaranteed by the state to unemployed people (apart from obligations put directly on employers¹⁷). The costliest measure is an **unemployment benefit**. The latter is financed by general revenues and is weakly related to the length of service and earnings of an employee, hence can be considered as a quasi-insurance program.

To be eligible for an insurance-based unemployment benefit an applicant should be employed at least for a period equivalent to 26 calendar weeks of full-time employment, during 12 months preceding the episode of unemployment. Each period of benefit payment cannot exceed 12 months, out of 18 consecutive months. If a person cannot find employment after the first 12 months, the period of payment can be extended. However, the total period of payment cannot exceed 24 months out of 36 months. The benefit is paid on a monthly basis conditional on applicant's registering with the employment service every two weeks. The size of the benefit is defined as follows:

- during the first 12-month period of payment: as proportion of the average salary of an applicant for the last 3 months of employment (75% during the first 3 months, 60% during the next 4 months, 45% during the last 5 months), but no more than the maximum size of unemployment benefit and no less than the minimum size;
- during the second 12-month period of payment: the minimum size of unemployment benefit;
- the minimum and maximum sizes of unemployment benefit are established annually by the Government. In all cases the size of the benefit is multiplied by a *rayon coefficient* to account for the extreme working conditions in the North. From January 1, 2009 the maximum unemployment benefit is set at the level of 4,900 Rubles and the minimum is 850 Rubles. These figures remained the same in 2010-2011.

For the unemployed lacking a sufficient insurance record (e.g. first-time job seekers, those who have exhausted their entitlements, those willing to start working after a year long break) and those dismissed due to violation of labour discipline, each period of the benefit payment cannot exceed 6 months during a 12-month period. If a person cannot find employment, the period can be extended up to 12 months out of 18 consecutive months. In both 6-month periods the size of the benefit equals the minimum size.

1.1 ¹⁶ *The Labour Code of the RF (Federal Law of 30.12.2001 No 197); Federal Law of 19.04.1991 No 1032-1 'On employment in the RF'.*

¹⁷ Say, in case of employee's dismissal due to the closure of an organization or personnel reduction a **severance pay** equal to the employee's average monthly wage has to be paid by the former employer until the dismissed person finds a job, but no longer than 2 months (3 months in exceptional cases) from the date of dismissal, provided the individual applies for a registration at the employment service within two weeks of dismissal.

The FSEL provides **pensions**¹⁸ to the recipients of unemployment benefits and **material aid** to those unemployed who exhausted their eligibility for the benefit. The Regional Budgets contribute to the relevant funds so that the employment record of the beneficiaries will not be interrupted for social and health insurance purposes. For example, a registered unemployed person may apply for sick leave benefits and maternity leave benefits (women) during which job search requirements are relaxed and the benefit payment periods extended.

Some types of benefits are aimed at supporting the participation of job seekers in active labor market programs to enhance their employability:

- The employment service may provide a **training stipend/allowance** – along with reimbursement for food, accommodation, and travel expenses from place of residence to the education and training venue – for job seekers who are provided education and training for the labor market. For the unemployed with sufficient insurance record (as for the unemployment benefit) the size of a scholarship equals 75% of their average earnings for the last 3 months at the last place of work, but no more than the maximum and no less than the minimum size of an unemployment benefit. Those who lack the minimum insurance record or were dismissed due to violation of labour discipline are eligible for the minimum size of an unemployment benefit.
- Participants in public works receive a **salary** which is not less than the minimum wage. Additionally they retain the right to claim unemployment benefits.

Registered unemployment rates in Russia are substantially lower than survey-based unemployment rates (by ILO definition), predominantly due to limited incentives for registration. Only around one third of the unemployed is registered with the public employment service. The unemployment benefit is paid to nearly 90% of the registered unemployed. In 2010 the total number of beneficiaries reached 1.3586 million people. However, the maximum size of the benefit was by 20% lower than the poverty line of a working age person, while the minimum size was equal to 14% of a poverty line. Also, until recently relatively few job seekers benefited from the ALMPs. The situation has changed in 2009, when in response to the economic crisis the Government has launched the program of additional measures to decrease tension at the regional labour markets. In 2010 the program covered 1.85 million unemployed¹⁹. The ratio of government expenditure on unemployment benefits and ALMPs changed from 5:1 in 2008 to 2:1 in 2010. However, despite the recent inflow of money, the public employment service is still severely challenged by a lack of funds, understaffing, fragmented networks of employment offices, limited labor market information, and the limited menus and scope of their employment services. On the other hand they are overburdened with serving registered job seekers who are actually not actively looking for jobs, but have to register because of the mandatory requirement of showing ‘unemployed status’ for obtaining means-tested social benefits.

¹⁸ Citizens who have not reached the statutory pension age, given that they have a required length of service (at least 25 and 20 years for men and women respectively), or are entitled to a superannuated pension envisaged by Articles 27 and 28 of the Federal law ‘On labour pensions in Russia’, the duration of the period of payment of the benefit is additionally increased by 2 weeks for each year of employment beyond the required indicated length of service. If the abovementioned citizens had been dismissed due to the closure of organization or personnel reduction, and there are no job opportunities available, the employment service may assign a pension for the unemployed person until the date of assigning of an old age pension but not until 2 years before that date.

¹⁹ The program measures ranged from public works to subsidies for the unemployed people willing to start-up a new business.

1.2.4 1.2.4 Children and families

The system of social protection of children and families comprises cash benefits and services for (1) families with children and (2) for children-orphan/children left without parental support. Noteworthy, almost all maternity related cash benefits were subject to revision in 2007 as a part of the Government strategy to suspend population decline. Since 2007 all federally regulated cash allowances for families and children are annually updated by inflation. In regions and territories that use special wage coefficients, the sizes of cash allowances are multiplied by these coefficients.

Cash benefits and services for families with children²⁰

The duration of paid maternity leave is 140 calendar days²¹. The size of a **maternity allowance** during this leave for women covered by social insurance is 100% of average earnings for the past 12 months preceding the leave. However, the maximum amount to be paid is linked to the upper limit of maximum tax base for social insurance contributions. In 2010 the upper limit of the tax base was 415,000 Rubles per calendar year, which results in the upper limit for maternity leave allowance of $(415,000/12=)$ 34,583 Rubles per month (38,562 Rubles in 2011). For unemployed women dismissed due to closure of an organization the size of the allowance equals 412,08 Rubles per month. For women whose insurance record is less than 6 months the size cannot exceed the minimum wage established in the region.

Upon completion of maternity leave mothers (fathers, adoptive parents, other relatives or guardians taking care of a child) are entitled to a paid child care leave up to 1.5 years²². In 2007 the rules of entitlement to a **monthly child care allowance up to 1.5 years** were considerably revised:

- Previously the size of the allowance was flat-rate. After the reform of 2007 the size of the allowance for mothers (fathers) who are subject to social insurance equals 40% of the average monthly earnings for the past 12 calendar months, but no less than the lower limit and no more than the upper limit. In 2010 the lower limit is set at the level of 2,060.41 Rubles per month for the period of leave with the first child and 4,120.82 Rubles for the period of leave with the second and subsequent children. The upper limit is derived from the maximum size of the tax base and equals $(40%*415,000/12=)$ 13,833 Rubles per month. For mothers dismissed during the period of pregnancy or

²⁰ The main legislative and regulatory documents are as follows: Federal Law No 81-FL of 19.05.1995 'On state allowances to citizens with children'; Labour Code of the RF (Articles 255-257); Federal Law No 255-FL of 29.12.2006 'On mandatory social insurance in case of temporary incapacity and maternity'; Federal Law No 256-FL of 26.12.2006 'On additional measures of support to families with children'; Federal Law of 10.07.1992 No 3266-1 'On education in the RF' (Article 52); Edict of the President of the RF of 5.05.1992 No 431 'On measures of social protection of families with many children'.

²¹ 70 days before delivery (84 days in case of multiple pregnancy) and 70 days after delivery (86 in case of birth complications, 110 days in case of the birth of two or more children). In case of adoption of the child (children) under 3 months the maternity allowance is paid from the date of adoption for 70 days (110 days in case of the simultaneous adoption of two or more children).

²² In case of the beginning of a new maternity leave during the child care leave, the mother has a right to choose one of the allowances. Unpaid child care leave can be prolonged up to 3 years.

maternity leave due to the closure of an organization the upper limit in 2010 was 8,241.64 Rubles²³.

- Until 2007 the allowance was insurance-based, but currently mothers with insufficient contribution record (less than 6 months) are also eligible for the minimum size of the allowance, which is set at the level of 1,798.51 Rubles for a period of leave with the first child and 3,597.01 Rubles for a period of leave with the second and subsequent children.
- Since 2007 the lower and upper limits of the allowance are annually updated for inflation.

According to the SIF data in 2010 (as of October) the allowance was paid to 2.033 million socially insured people and 1.596 million socially uninsured people, hence to 3.630 million people in total.

A **monthly allowance for children of the military at the compulsory military service** have been introduced in 2008. It is covered from the Federal Budget and granted to mothers/guardians of a child from the birth up to 3 years irrespectively of all other child related allowances, but only for the period when the father is in compulsory military service. The allowance amounted to 7,458 Rubles per month in 2010.

There are several lump sum allowances in connection with the birth of a child that are granted to all mothers irrespectively of their insurance record.

A **lump-sum allowance to women registered in medical establishments in the early stages of pregnancy (12 weeks)** equal to 412.08 Rubles is payable together with the maternity allowance from the Social Insurance Fund. According to the Social Insurance Fund in 2010 the benefit was paid to 717.315 women.

A **lump sum allowance on the birth of a child** is a flat-rate benefit payable to one of the parents (or a person replacing the parent) from the SIF irrespectively of an insurance record. The size of the allowance was raised in 2007 as a part of the package of measures aimed at promoting fertility. According to the SIF statistics in 2010 the size of the allowance amounted to 10,988.85 Rubles (11,703.13 Rubles in 2011) and it was paid 1.579 million times (including 1.158 million times to socially insured people and 0.421 million times to socially uninsured people).

A **lump sum allowance for a pregnant wife of the military in compulsory military service** was introduced in 2008 and is payable to women if their pregnancy term is no less than 180 days and their husband is in compulsory military service. It is granted irrespectively of other allowances. In 2010 the size was equal to 17,402 Rubles.

A **maternity capital** is granted to each woman who gave birth or adopted the second (third and consequent) child²⁴. It was the key element of a package of policy measures introduced in

²³ In case of a leave to care for two or more children the size of the allowance is doubled. It cannot be less than the established minimum size, but cannot exceed 100 per cent of the average earnings for the past 12 calendar months.

²⁴ The father is entitled to the maternity capital in case of mother's death or if he is the only adoptive parent of the second and consecutive children.

2007 in order to promote fertility. The capital is not taxable²⁵ and its size according to the law adopted in 2007 was equal to 250,000 rubles. This sum is annually updated by inflation. The size of the capital was increased to 343,278 Rubles in 2010 and to 365,700 Rubles in 2011. Each mother is entitled irrespectively of the date of a birth of the first child, but only once. The child to whom the capital is granted should have Russian citizenship.

Mothers are allowed to dispose of the capital in three ways: to improve living conditions (purchase, construction, overhaul of a dwelling) via the bank transfer; to pay for all types of education of children²⁶; to add to the funded element of the mother's pension. The capital may be used piecemeal or in parts for different purposes. The right to dispose of the maternity capital comes into effect when the child reaches the age of 3 or upon expiration of 3 years following the adoption. However, these limitations were partly eased in 2009-2010 as a part of the anti-crisis program of the Government²⁷. During the period of 2007-2010 2.612 million people have received certificates for a maternity capital (including 789,000 people in 2010). The first beneficiaries were allowed to use the assets of the capital to pay for the mortgage credits in 2009. The numbers were 96,000 in 2009 and 246,000 in 2010. In total during 2009-2010 1.606 million people received a lump-sum payment equal to 12,000 Rubles from the assets of the capital.

A monthly allowance for children under 16 (18) years from poor families is the only means-tested program for families with children. The unified federal child allowance was introduced in 1994 and was initially granted to all children up to 16 years (or 18 years if they are in full-time education). In 1998 the first income test was introduced which limited the number of recipients by families whose income was below 200% of a regional poverty line (100% of a regional poverty line since 2000). Such a measure was aimed at providing better redistribution of scarce financial resources in the interests of the poorest families with children, but in practice the allowance was granted to more than 70% of all children, while its size was equal to 3% of a child's poverty line. Moreover, until the mid-2000s arrears in payment of the allowance were common. In 2005 in the course of the decentralization reform the authority for legislative regulation of the allowance were handed over to the regions. The size, conditions of entitlement, indexation and payment of a monthly child allowance are currently regulated by the regional laws and other legislative acts. The responsibility for financing the allowance also lies with the regional budgets, although before 2010 the Federal Budget co-financed these payments to some degree (from 1% of the cost in Moscow-city to 50% in the republics of Northern Caucasus).

Although designed as a means-tested program, child allowances have the highest coverage among the family related cash benefits. In 2010 the allowance was paid to 9.943 million children, which makes about 7% of the total population or 43.5% of the population under 16 years. In the regions of Northern Caucasus and South of Siberia, those with the high share of

²⁵ According to amendments to Article 23 of the Tax Code. However, according to amendments to Articles 219 and 220 the taxpayers lose their right to social tax deductions if the maternity capital is used to cover expenses on education, construction or purchase of a new accommodation or a part of it.

²⁶ The capital may be spent on education of any child up to 25 years in educational institutions on the territory of the RF.

²⁷ In January 2009 this limitation was cancelled for mortgage loans in order to support borrowers in conditions of growing interest rates on loans during the economic crisis. Additionally, during 2009-2010 the eligible families were allowed to get a lump-sum payment for daily needs from the assets of maternity capital in the amount of 12,000 Rubles.

children in the population and low level of formal income, the share of program beneficiaries in the total population is almost the same as the share of the child population (18-28%). In contrast, in St-Petersburg and Leningrad oblast the share of beneficiaries is below 3% of the total population. The eligibility criteria differ from region to region as well. For example, in Moscow-city since 2009 the allowance is provided to all children under 18 years, whether they are in full-time study or not. In Tiumen region the family income is compared with the threshold defined by the regional administration, which equals 2/3 of the regional poverty line.

The most differentiated characteristic is a size of the allowance. In 2010 a basic monthly payment²⁸ varied from 70 to 1000 Rubles per child with median of 150 Rubles. Only in 3 regions out of 83 (Moscow-city, St-Petersburg and Moscovskaya Oblast) the basic size reached 10% of the official poverty line of a child, in 9 regions it was equal to 5-10% of the poverty line, in half of the regions it was below 3%. Thus, the case of child allowances shows how social protection program can be a factor augmenting rather than smoothing the regional disparities in living standards of families with children.

The main type of services for children living in families is **child care**²⁹. The current system, inherited from the Soviet times, guarantees formal full-time pre-school education for all children under the minimum school age (6-7 years). However, the availability of preschool institutions has been rapidly deteriorating since the early 1990s. Currently the supply of such services both by quantity and quality does not satisfy the growing demand, especially due to the recent fertility growth. During the 2000s the share of children attending pre-school institutions was below 60% (59% in 2010). The number of preschool institutions has decreased from 53.9 thousand in 1999 to 45.1 thousand in 2010. In combination with the uneven distribution of these institutions across regions and municipalities, this has led to a dramatic increase in the number of children waiting for a place in a preschool institution (from 192.9 thousand in 1999 to 2144.8 thousand in 2010). The lack of institutional care for children has to be compensated for by inter-familial networks of support. The problem is aggravated by the fact that the system of social services for the elderly is also weak and the market for these services is absent.

Childcare funding is mostly public. Parents contribute in the form of fees, covering only part of the real cost. **Supply-side subsidies for institutional child care** constitute at least 80% of the cost of childcare services³⁰. The main responsibility for funding pre-school educational institutions lies with the Regional and Municipal budgets. However, most of the latter are unprofitable and the constitutional guarantees of child care are not fully fulfilled. The financial deficit of child care institutions is covered by increasing the prices paid by the parents. As a result low-income families often cannot afford public child care. In response to these challenges in 2007 the Government has introduced a **compensation of charges for pre-school institutions providing a general program of pre-school education**, funded from the Regional Budgets. The program covers all children attending state, municipal and private child care institutions. For children attending state/municipal institutions the monthly size of

²⁸ A number of regions has selected additional categories of vulnerable children that are eligible for a higher size of the allowance, usually those are children of single mothers or children whose non-resident parents avoid paying alimony, children whose fathers are at compulsory military service, children from large families, disabled children.

²⁹ Apart from child care, basic state services for children living in families also include the **provision of facilities for summer recreation** and services for children with disabilities (the latter are covered in the relevant section).

³⁰ The maximum share of the cost of keeping a child in the state or municipal childcare institutions paid by the parents equals 20% of the total cost.

the compensation is based on actual monthly fees paid by their parents; while for children attending private institutions the actual fees are taken into account up to the amount of the average cost of keeping a child in a municipal pre-school institution in a given Russian region. The size of compensation amounts to no less than 20% of the average fees in the region for the first child in the family; to 50% – for the second child; and 70% for the third child and other children born afterwards³¹. In 2009 the total number of the recipients amounted to 4.2 million people.

Apart from child care, basic state services for children living in families also include the provision of **recreation and health improvement for children**. From January 2010 the responsibilities for provision of these services were passed to the regional level. The services comprise *maintenance of children's summer camps* and *discounts on vouchers* (up to 50% of the cost of a voucher on average for all parents, up to 95% for the budgetary sector employees). Children in hard life situation are entitled to free vouchers at the expense of the Federal Budget. According to the Ministry of Health and Social Development in the period of January 1 – October 25, 2010 these services were provided to more than 7.7 million children (50.5% of the total number of children of school age).

Many regions have introduced their own **programs for vulnerable groups of families with children**, comprising cash allowances and services, e.g. for large families (families with 3 and more underage children). The social package for large families recommended by the Federal Government comprises such measures as discounts on payment for housing/utilities and transportation, free school lunches and cloth, assistance to families willing to start a farm or a small business, priority provision of land plots, financial aid for home construction, employment related assistance. The actually provided benefits vary considerably from region to region, depending on the priorities of regional authorities and budget constraints.

Cash benefits and services for children-orphans³²

Over the 2000s the proportion of the orphaned children/children deprived of parental care³³ in the child population of Russia remained at the level of 2.5-2.7%. In 2010 in Russia there were 761,391 children left without parental care in total, including 101,017 newly detected cases. A significant number of these children is placed in *institutional care* (120,747 children or 16% of the total number in 2010³⁴). Since mid-2000s the Government has been actively pursuing a strategy of de-institutionalization of arrangements for children-orphans, which resulted in a growth of the number of children placed in families. The most common forms of family arrangements envisaged by the Family Code are as follows:

³¹ The family comprises children up to 18 years and children up to 23 years if they study full-time.

³² The main legislative and regulatory documents are as follows: Family Code of the RF; Federal Law No. 195-FZ of 10.12.1995 'On Basic Regulations on Population Social Services in the RF'; Federal Law No. 124-FZ of 24.07.1998 'On Basic Guarantees of the Child's Rights in the RF'; Federal Law No. 120-FZ of 24.06.1999 'On Principles of the Child Neglect and Juvenile Delinquency Prevention System'; Federal Law No. 159-FZ of 21.12.1996 'On Additional Guarantees for Social Support of Orphaned Children and Children Deprived of Parental Care'; Federal Law No. 44-FZ of 16.04.2001 'On State Bank of Data on Children Deprived of Parental Care'; Federal Law No. 48-FZ of 24.04.2008 'On Guardianship and Trusteeship'.

³³ The specificity of the Russian situation is the prevalence of so called **social orphans**, or children whose parents are alive, but are deprived of parental rights.

³⁴ Although the figure decreased from 27% in 2000.

- *Guardianship* up to 14 years and *custody* from 14 to 18 years (430,604 people or 57% of all orphaned children in 2010). A guardian/trustee virtually fulfills full-scale parental duties, with a child keeping his/her orphan status; no civil legal relationships arise between such a child and the guardian/trustee after the guardianship ends. At the same time a guardian/trustee receives payments for the child support, and the child has the right for a number of social benefits.
- *Adoption* (131,308 children or 17%). Adopted children acquire the same legal status as biological children, they are equal in their rights and obligations with regard to their adoptive parents, and vice versa. An adopted child, unlike a child who keeps an orphan status, has no right for additional social support.
- *Foster families and family-type children's homes* (78,732 people or about 10%). This type of family arrangement can be referred to as paid care forms. Unlike guardian families, foster families are monitored and supported by the state social protection bodies.

The main component of social protection for orphaned children are pensions. Children whose parents died are entitled to a **survivor's pension** up to 18 years (up to 23 years if in full-time study). If the parent had at least one day long employment record the child is entitled to a **labour survivor's pension**. In the absence of the labour record of the parent a **social survivor's pension** is envisaged³⁵. The labour pension consists of a fixed basic element (in 2011 2,963.07 Rubles per month for children who lost both parents) and a contribution element calculated on the basis of the accumulated pension capital of the parent^{36,37}. The size of a social survivor's pension for children who had lost both parents was set at the level of 6,357.08 Rubles, which corresponds to 110% of a child's poverty line. Noteworthy, if the size of the labour pension is lower than the size of a social pension, the beneficiary may switch to the social pension. If a child is living in the children's home the pension is paid into his private account in the state bank (Sberbank) to be received by the child upon the date of leaving the children's home.

One of the measures targeted at promoting de-institutionalization of arrangements for children-orphaned, was introduction of a **lump-sum allowance on placement of a child into a family** (since 2007). The allowance is paid for each child to one of the adoptive parents, guardians/trustees or foster parents. The size of this allowance is set at the level of a lump-sum allowance on child birth (10,988.85 Rubles in 2010 and 11,703.13 Rubles in 2011).

A number of cash allowances for orphaned children/children left without parental care are regulated by the regional legislation (including eligibility and sizes) and are funded from the Regional Budgets. The payments are made on the basis of a contract between the regional agency on guardianship/trusteeship and a guardian/foster parent:

³⁵ Before 2010 the social pension was paid to children up to 18 years only.

³⁶ If the parent were in receipt of a labour old age or disability pension, the size of the survivor's pension is calculated on the basis of the size of a contribution element of the parent's pension.

³⁷ The pension size for children who lost both parents are calculated on the basis of a summary pension capital accumulated by both parents; for children of a single mother her accumulated capital is doubled.

- A **monthly remuneration for a guardian/trustee** is financed at the expense of income from property of the child in care³⁸, other parties' assets and the Regional Budget, although these expenses are partly subsidized by the Federal Budget.
- A **salary for a foster parent**. The Regional Budget is the main source of funding, but the expenses are partly subsidized from the Federal Budget given that the established size of a monthly salary is no less than 2,500 Rubles.
- Both guardian and foster families are entitled to a **monthly payment for child support**. The size of the payment is differentiated by region. For example, in Moscow-city the size is set annually by the Government of Moscow at the level which is no less than the cost of a regional poverty line for children under 16 years. In general, the expenses are partly subsidized from the Federal Budget if the size of monthly payments established in the region is no less than 4,000 Rubles per child. The lower limits, however, have not been updated since 2007.

The orphaned children/children left without parental care are entitled to a number of **privileges** (in kind benefits). For example, these children have a right to a priority entry into the institutions of secondary and higher professional education given that they have successfully passed the entry examinations. The privileges provided by the regions may include a lump-sum or regular material aid in cash and in kind, discounted or free transportation, recreation and rehabilitation services, etc.

The system of services for the orphaned children/children left without parental care comprises the following measures:

- **Prevention of family disfunction and social orphanhood**. Despite the absence of a unified system of primary prevention of orphanhood, some measures are envisaged by the targeted federal and regional programs, e.g. the *Foundation for support of children in hard life situation*. In the system of state social services new institutions (such as temporary orphanages, crisis centres, etc.) have been created to help families in hard life situation.
- **Maintenance of institutions for the orphaned children (children's homes, boarding schools, etc.)**, in which they are living at full board.
- **Social adaptation of the orphaned children** upon leaving the children's home/boarding school or upon the end of guardianship, including: job placement, social and psychological counseling, etc.

1.2.5 1.2.5 Social assistance³⁹

The main element of the Soviet social protection system, **privileges** still remain the most costly social assistance program in Russia. These are non-contributory and not means-tested benefits, usually in the form of free services or discounts on payment for services⁴⁰, provided

³⁸ The upper limit is set at 5% of income from property of the child in care.

³⁹ Federal Law No 178-FL of 17.07.1999 'On state social assistance'.

⁴⁰ These programs are broad ranged, such as free access to a wide range of services and goods, e.g. exemptions from/discounts for rent or utility payments; telephone services; medicines, medical appliances, health care services; municipal, commuter or long-distance transport; vouchers for sanatoriums, spas, child care facilities, or summer camps. Some categories of citizens are exempted/discounted from real-estate taxes, or may receive substantial financial support to repair their house, or may be provided with a land plot.

to vulnerable categories of the population, such as people with disabilities, war veterans, dependents of war victims, victims of the Chernobyl accident, etc., but they also cover numerous privileges for groups based on their merits before the state and on their occupational status.

In order to make the program more transparent in January 2005 the Government launched the major reform of monetization of in-kind privileges. Additionally, the responsibility to finance privileges was clearly divided between the federal and the regional governments⁴¹. Major merit-based privileges (for example, for war veterans and their dependents, heroes of the Soviet Union and Russia) and all privileges for the disabled have remained the responsibility of the federal authorities. Other merit-based privileges (for labour veterans, workers on the homefront, victims of political repressions), as well as all privileges established by the legislative acts of the regions have become the responsibility of those regions. Thus a part of the population entitled to privileges became *federal beneficiaries*, while the remaining part became *regional beneficiaries*. Initially the degree of monetization differed sharply between federal and regional levels. Almost all federally funded privileges (apart from discounts on payment for housing/utilities) have been substituted by a monthly cash payment already in 2005. The majority of regions have monetized their in-kind privileges only in 2009-2010 under the financial incentives created by the federal authorities⁴². Currently less than 10 regions (including Moscow-city) still provide some in-kind privileges – discounts on payment for transportation and housing/utilities. The payment of cash benefits to the federal beneficiaries is carried out by the Pension Fund. The cash benefits for regional beneficiaries are provided by the local social protection departments. In-kind privileges for all beneficiaries are provided by those departments as well.

One individual may fall under several categories of the privileged population; however typically a beneficiary can claim only one type of a monthly cash payment at his/her choice (with the exception of some categories, e.g. victims of the Chernobyl accident, heroes of Russia). The federal authorities provide three types of cash benefits. A **monthly cash payment** for federal beneficiaries in 2011 varied from 361.99 Rubles (e.g. for people living in settlements that were exposed to radioactive pollution as a consequence of the industrial accident at enterprise ‘Mayak’ in 1957) to 42,654.32 Rubles (e.g. for the Heroes of Russia). Additionally, recipients of the monthly cash payment are entitled to a **package of social services**. From April 1, 2011 the cost of the package was equal to 750.83 Rubles (including 578.30 Rubles for medicines, medical appliances and dietary products, 89.46 Rubles for vouchers on sanatorium treatment, 83.07 Rubles for free transportation to a place of treatment). A beneficiary can choose whether to get the services or to substitute the whole package or any element of the package by a monthly cash benefit. A smaller group of federal beneficiaries with outstanding achievements and merits before the state is entitled to an **additional monthly material provision** defined as a flat-rate benefit (e.g. 500 Rubles for some categories of WWII participants) or tied to a social pension size (e.g. 415% of the social

⁴¹ Federal Law of 22.08.2004 No 122-FL ‘On amendment to the legislative acts of the RF and recognition of a lapse of force of some legislative acts of the RF in relation to pass of the federal laws ‘On amendment and additions to the Federal law ‘On general principles of organization of legislative (representative) and executive bodies of power of the subject of the RF’ and ‘On general principles of organization of local government in the RF’.

⁴² In particular, only regions that had monetized their privileges received a right to apply for a subsidy from the newly created Fund of promotion of the reform of housing and utility sector.

pension for Heroes of Russia). The sizes of federal cash benefits are indexed annually (on April 1) by inflation.

Regional authorities provide several types of cash payments to their beneficiaries. In 2010 the average size of a **regular cash payment**⁴³ (payment made on a monthly or quarterly basis) ranged from 467 Rubles for labour veterans to 605 Rubles for citizens with honorary degrees/special merits before the region. An average **lump-sum cash payment** (payment made once a year and more rarely) for these groups ranged from 997 to 2,729 Rubles, respectively. Regional authorities may set up **additional regular** or **lump-sum payments** for federal beneficiaries. For instance, in 2010 an additional regular cash payment ranged from 436 Rubles for honorary donors to 10,851 Rubles for Heroes of Russia⁴⁴. Noteworthy, due to the incomplete monetisation the aforementioned sizes of cash payments provided at the expense of the Regional Budgets do not include the cost of discounts on payment for housing/utilities. As far as the indexation is concerned, it is not necessarily guaranteed and usually carried out on ad-hoc basis.

Complex structure of the system of privileges – the possibility of being entitled to several types of privileges at the same time, manifold forms of provision (cash and in-kind benefits) and different sources of financing (federal and regional), makes it almost impossible to assess the scope and scale of the program based on the official statistics. In 2010 16.694 million people received a monthly cash payment for federal beneficiaries. The majority of them (over 13 million) were the disabled⁴⁵. The number of people who received a regular cash payments from the regional authorities amounted to at least 11.945 million⁴⁶. Hence by a conservative estimate, at least 28.639 million people in Russia were entitled to one or another type of privileges in 2010.

Apart from privileges, there are three means-tested programs of social assistance targeted at different types of need. Low-income families and citizens may apply for a **state social assistance**. These measures are regulated by regional legislation and funded entirely from the Regional Budgets. Thus the scale and type of help depends greatly on the priorities and financial constraints of regional authorities. The summary of regional rules is provided below:

- In legislative acts of the majority of regions the right to the benefit is granted according to the Federal Law. Thus, a family or an individual is entitled to assistance if their income for the last 3 months is below a regional poverty line for the reasons they were not able to prevent (like a necessity of taking care for a disabled family member, etc.). Some regions, however, have established their own means-test criteria. For instance, in Khabarovskiy Krai per capita family income has to be below 75% of the poverty line. In Komi Republic per capita family income is compared with the guaranteed cash income established by the regional law. In Kabardino-Balkarskaya Republic, the means-test is based on the Minimum Wage.

⁴³ Without the cost of a package of social services.

⁴⁴ FSSS data ('Realization of some measures of social protection of the citizens in 2010', 2011).

⁴⁵ Including war invalids, disabled children, disabled adults.

⁴⁶ This figure includes four largest categories of regional beneficiaries – labour veterans, workers on the homefront, victims of political repressions and citizens with honorary degrees/special merits before the region.

- Only 40 regions provide assistance to all poor families. In 39 regions only specific categories of the poor are entitled to help. As usual, the priority groups comprise: one-parent families, families with many children, families with disabled and elderly family members. Finally, the minority of regions (including Moscow and St-Petersburg) do not apply means-test at all, providing support to specific categories of families that are considered vulnerable to poverty.
- Forms of assistance also vary considerably from region to region. Currently, the most popular form of state social assistance is a lump-sum payment. It is established in 77 regions and in 10 of those it is the only available form of support. In-kind forms of help (fuel, food, cloths, footwear, medicines, etc.) are provided in 59 regions. Only 46 regions provide regular cash benefits and 23 regions provide discounted or free access to social services (i.e. privileges). All of the above-mentioned forms of support are provided in 12 regions (including Moscow). Starting from 2010 The Ministry of Health and Social Development has been carrying out an experiment in 17 subjects of the RF on providing the state social assistance on a basis of social contract⁴⁷.
- In those regions that do have regular cash payments their size is usually calculated as a (fraction of) the difference between the family/individual poverty line and total family/individual income. For example, in Moskovskaya Oblast, the benefit size equals 50% of the poverty shortfall. In legislative acts of some regions (e.g. St-Petersburg) this is accompanied by the following condition: ‘given the annual funds allocated for this purpose in the regional budget’. This enables the authorities to set the upper limit of the benefit without changing the law annually. The upper and/or lower limits may also be directly set by the regional law. For example, in Moskovskaya Oblast the size of the monthly benefit cannot be below 100 Rubles per person and cannot exceed 500 Rubles per person. These limits are annually updated based on CPI. In Ivanovskaya Oblast the upper limit equals the minimum wage.

In 2010 for Russia as a whole an average monthly cash payment was equal to 306 Rubles per one family member, while an average lump-sum payment amounted to 1,789 Rubles per family member. The number of beneficiaries is quite low (especially when compared to the program of privileges). While in 2010 there were 3.670 million people who conformed to the program criteria, the number of those who actually received a regular cash benefit amounted to 1.394 million people, and the number of recipients of a lump-sum payment was 1.103 million people.

To target pensioner’s poverty in January 2010 the government has launched a program of **social supplement for non-working pensioners**. This benefit is provided to all non-working pensioners whose total income (including all types of pensions and cash benefits, except for lump-sum benefits) is below the cost of a pensioner’s poverty line in the given region. The size of the benefit equals the gap between the pensioner’s poverty line and the pension benefit. There are two types of supplements – federal and regional. If the cost of a poverty line in the given region is below the cost of the federal poverty line, the pensioners are eligible for the federal payment which is provided by the Pension Fund and funded by transfers from the

⁴⁷ The beneficiaries have to sign a social contract (or a contract of social adaptation) to confirm their cross obligations to the state upon receipt of the benefit. The obligations might include (subject to the category of an applicant): an active job search with the help of the State employment service, enrollment into a professional training program, etc.; self-employment, including subsistence farming; provision of attendance of school by children of the beneficiary; voluntary treatment of alcohol (narcotic) addiction; repair of dwelling, etc.

Federal budget. Otherwise, the regional payment is provided by the regional social protection offices and funded by the Regional Budgets (and partly by intra-budgetary transfers). The number of pensioners entitled to the supplement in 2010 was 4.943 million people or 12% of the total number of pensioners.

In addition to numerous privileges on payment for housing/utilities inherited from the Soviet social protection system, in 1994 the Government has launched a means-tested program of **housing subsidies** aimed at reducing the housing/utility costs for the needy. Unlike state social assistance, housing subsidies are significantly regulated by the federal legislation so the influence of the regional administration on the program design is limited⁴⁸. Before 2007 the Regional Budgets used to receive targeted subsidies from the Federal budget to cover the costs of the program within the federal standards. Currently the program is fully funded by the Regional Budgets, however, for many of them the budget deficit is covered though the dotations of the Federal Budget, which basically makes the flows less transparent.

The housing allowance is granted to all citizens if (1) their *expenditure on rent and utilities within the limits of the regional social standards of living space and the cost of utilities* are higher than (2) *the established maximum share of such expenditure in the monthly household income*. The actual size of the housing subsidy is calculated by subtracting (2) from (1). The eligibility is assessed according to the monthly per capita household income averaged over the last 6 months preceding the date of application⁴⁹. For the households whose per capita income is lower than a regional poverty line, the maximum share of expenditure on rent and utilities in total monthly income is reduced using the *correction coefficient*, which is equal to the ratio of per capita household income to the household poverty line (see **Box 1**). Finally, the size of a housing subsidy cannot be higher than the actual amount spent on rent and utilities. All in all, the size of subsidy is subject to housing conditions as well as household income.

Box 1 – The methodology of calculating the size of housing subsidy

The size of a housing subsidy HA_1 for non-poor households (total household income is equal to or higher than the household poverty line)

$$HA_1 = RS_r * n - EMP_r / 100 * HI,$$

where

HA_1 – the size of a housing subsidy for non-poor households (Rubles); RS

r – a regional standard of the cost of rent and utilities per one household member for families of various size (Rubles);

n – number of household members; EMP_r – a regional standard of the established maximum share of expenditure on rent and utilities in total household income (per cent);

HI – total household income (Rubles).

⁴⁸ The federal rules are set by the Housing Code of the RF and the Resolution of the Government of the RF No. 761 of 14.12.2005 'On provision of subsidies on payment of rent and utilities'.

⁴⁹ Noteworthy, if in the household there are working age people who do not work for 6 months or less and are not registered as unemployed, their share in the subsidy is deducted from the total subsidy received by the household (except for mothers taking care of children under 3 years, mothers with 3 and more children under 14 years, the disabled and people taking care of the disabled or sick household members, and citizens under 23 years studying full-time).

The size of a housing subsidy HA_1 for poor households (total household income is lower than the household poverty line)

$$HA_2 = RS_r * n - EMP_r / 100 * HI * K;$$

where HA_2 – the size of a housing subsidy for poor households (Rubles);

K – correction coefficient calculated as follows:

$$K = PCI / SM_r;$$

where PCI – per capita household income (Rubles); SM – per capita subsistence minimum level of the household (Rubles).

$$SM = (SM_a * n_a + SM_p * n_p + SM_c * n_c) / n_a + n_p + n_c;$$

where SM – per capita subsistence minimum level (Rubles); SM_a – subsistence minimum level of working age population (Rubles); SM_p – subsistence minimum level of pensioners (Rubles); SM_c – subsistence minimum level of children under 16 years (Rubles); n_a – number of working age people in the household; n_p – number of pensioners in the household; n_c – number of children under 16 years in the household.

All regional standards are defined by the regional legislation, but cannot be lower than the minimum standards established by the Housing Code. (1) *Regional standards of the cost of housing and utilities* are calculated on the basis of assumptions about the norms of the living space. The federal (minimum) norms of living space are: 18 sq. m. per person in a household of 3 and more members; 21 sq. m. per person in a 2-member household; 33 sq. m. for people living alone. (2) *Regional standards of the established maximum share of expenditure on rent and utilities in the total household income* cannot exceed 22% (the federal standard). Also municipal standards can be applied provided that they are not lower than the regional ones.

According to official statistics, in 2010 an average monthly size of a subsidy was 896 Rubles per household-beneficiary. In total subsidies were paid to 3.7631 million households (or 7.3% of the total number of households).

Finally, social assistance includes **services for homeless people**. In 2010 there were 139 state institutions (dosshouses, shelter facilities, centres for social adaptation, etc.) for homeless people in Russia as a whole, providing services to 88,000 people.

1.2.6 1.2.6 Health care

Health care is free at the point of demand for all Russian citizens⁵⁰. The state guarantees of free health care include in and out-patient treatment, as well as rehabilitation/nursing care and provision of medicines/medical appliances for specific categories of patients⁵¹. They are funded through the mandatory health insurance and general revenues of the Consolidated Budget. Employers and self-employed pay Social insurance contributions to the Federal and

⁵⁰ People without citizenship have a right to free emergency care.

⁵¹ In fact free provision is quite limited which results in a growth of private payment for medical services, even for those provided by state medical institutions. The share of the population expenditure in financing health care has increased from 10% in mid-1990s to 40-45% in mid-2000s (see: UNICEF 2011. Situation Analysis of Children in the Russian Federation: On the Way to Society of Equal Opportunities Moscow UNICEF, Independent Institute for Social Policy.

Territorial Funds of Mandatory Health Insurance (in 2011 at the rate of 2.1 and 3%, respectively). The costs of health insurance of non-working citizens are covered by the Regional Budgets

Health related cash allowances are provided by the Social Insurance Fund⁵². Its revenues are generated by Social insurance contributions paid by employers and self-employed (2.9% of gross earnings in 2010) and transfers of the Federal budget to cover the costs of payments to some categories of uninsured persons. The Fund also accumulates employer contributions on mandatory workplace accident and work-related disease insurance (0.2 to 8.5% of gross earnings depending on the type of an enterprise). The main health related allowances are listed below.

A **temporary incapacity benefit** is paid to the insured persons during the whole period of absence from work due to sickness or a necessity of taking care for a sick family member, based on a certificate issued by a medical institution. In some cases the period of payment may be restricted to 24-90 days during one calendar year⁵³. The size of the benefit is differentiated by a length of service of the insured person:

- 60% of average earnings for employees with less than 5 year employment record, the upper limit in 2010 was 20,750 Rubles per month;
- 80% for employees with 5 to 8 year record, the upper limit was 27,666 Rubles per month;
- 100% for employees with more than 8 year record, the upper limit was 34,583 Rubles per month⁵⁴;
- No more than the minimum wage (multiplied by a rayon coefficient where applicable) per month for employees whose record is below 6 months.

The period of payment of a full size benefit may be restricted in some cases⁵⁵.

A **funeral grant** is paid to one of the relatives who took upon himself/herself the responsibility to arrange the funeral of an insured person. The size of a grant equals the cost of services provided according to the list of guaranteed funeral services, but is limited by 4,000 Rubles multiplied by a rayon coefficient (since 2009).

A **workplace accident/work-related disease insurance** covers the following payments:

⁵² The main legislative and regulatory documents are: Federal Law of 16.07.1999 No 165-FL 'On foundations of social insurance'; Federal Law of 29.12.2006 No 255-FL 'On mandatory social insurance in case of temporary incapacity and maternity'; Federal Law of 12.01.1996 No 8-FL 'On funeral and funeral services'; Federal Law of 24.07.1998 No 125-FL 'On mandatory social insurance in case of workplace accidents and work-related diseases'.

⁵³ E.g. the period of payment for a person taking care of a sick child under 7 years cannot exceed 60 days during one calendar year (and 90 days in case of virulent diseases from the list defined by the federal authorities), etc.

⁵⁴ E.g. in case of taking care of a sick child at home the insured person is entitled to a full size insurance benefit during the first 10 calendar days and 50% of average earnings during the rest of leave.

⁵⁵ E.g. in case of taking care of a sick child at home the insured person is entitled to a full size insurance benefit during the first 10 calendar days and 50% of average earnings during the rest of leave.

- a **temporary incapacity benefit** equal to the 100% of average earnings (without upper limit) is paid during the whole period of work incapacity and until recovery or ascertainment of a permanent loss of work capacity.
- a **lump-sum insurance payment** to the insured person or (in case of his/her death) to his/her dependents, calculated according to the degree of loss of work capacity (the basic size is set at the level of 64,400 Rubles for 2010-2012).
- a **monthly insurance payment** defined as a percentage of average monthly earnings, calculated according to the degree of loss of work capacity, but no more than 49,520 Rubles (in 2010-2012).
- a **coverage of additional costs related to the medical, social and professional rehabilitation**, including: medical treatment; medicines and medical appliances; special medical care (900 Rubles per month) and special personal care (225 Rubles per month); rehabilitation in sanatorium; additional paid leave (equal to average earnings) during the time of rehabilitation and transportation to a place of rehabilitation and back; provision of a vehicle, costs of a current repair and fuel for a vehicle (835 Rubles per year paid on a quarterly basis); costs of a major repair of a vehicle (but no more than 30% of the cost of the vehicle or 50% of the cost of the cycle-car); vocational training; work training.

1.2.7 1.2.7 Disability

The number of people with disabilities in Russia has been growing in the last 20 years. However, over this period the definition and criteria of disability were changed several times, which could affect the reliability of official statistics of disability. In 2010 in Russia there were 12.866 million people with disabilities (including 541 thousand children under 18 years) registered in the system of the Pension Fund, hence eligible for one or another type of social support. The system of social protection is mainly targeted at material assistance to people with disabilities. The recent revisions in the social protection system has mainly affected the cash allowances for the disabled.

The main cash allowance related to disability is a **disability pension**. In 2010 2.703 million people received a disability pension. Its average size was equal to 5,136.5 Rubles per month. According to the Pension Fund in 2011 the size of a social pension was fixed at the level of 6357.08 Rubles per month for the disabled children and disabled adults of the 1st and 2nd group of disability and to 2,701.76 Rubles per month for the disabled adults of the 3d (lowest) group of disability. The total number of recipients of disability pensions is lower than the total number of the disabled, because the rest of them choose to receive an old-age pension, which is higher for people with the easiest form of disability. In 2010 30.7% of recipients of disability pensions were employed.

All disabled persons are entitled to a **monthly cash payment**, which substituted some of the in-kind privileges in 2005, and is financed by the Federal Budget. In 2011 the size ranged from 1,808.80 Rubles per month for the disabled children to 2,532.78 Rubles per month for the disabled adults with the hardest form of disability (1st group). In addition, people with disabilities are entitled to a **package of social services** (which they may choose to substitute by a cash payment).

The disabled and their families are covered by a wide range of **in-kind privileges**⁵⁶, including: at least a 50% discount on payment for housing/utilities and a right to priority provision of housing and land plots; exemptions from payment for pre-school institutions for the disabled children; compensation of the costs of studying at home and in private educational institutions; priority enrollment of the disabled children to the state and municipal higher education institutions provided they have successfully passed entry examinations.

There are cash allowances for people who take care of the disabled people at home⁵⁷:

- One of the parents (including guardians and foster parents) of a disabled child who takes care of the child up to 8 years is entitled to a **superannuated old age labour pension**. The pension is paid to women aged 50 years and men aged 55 years provided that their insurance record is no less than 15 and 20 years, respectively.
- A **monthly compensation to persons who take care of the incapable to work citizens**. The latter are the persons with disability of the 1st group, the elderly persons who require a constant personal care or aged 80 years and more. The majority of beneficiaries are parents of the disabled children. In 2008 the size of the compensation was set at the level 1,200 Rubles and has not been reconsidered so far.
- One of the parents/guardians/foster parents of the disabled child has a right to **4 additional days of paid leave**. The costs are covered by the Social Insurance Fund.

The social protection system provides social care services for the disabled/elderly, but they are poorly developed. The market for these services is practically non-existent. The system comprises several types of **institutions of social care**:

- in-patient institutions for the elderly and disabled adults (in total 1,475 institutions providing care to 271,000 people in 2010);
- in-patient institutions for the disabled children (143 institutions providing care to 24,000 children);
- boarding schools for the children with limited health capacities (1,267 institutions for 141,600 people);
- out-patient institutions (2,185 institutions, including 528 centres of temporary stay providing services to 34,835 people annually and 929 centres of day stay providing services to 572,662 people);
- offices providing home-based care, such as aid with housekeeping, etc. (11,395 offices that serviced 1,088,921 clients).

Yet thousands of people were on a waiting list, including 19,700 people who were in need of a placement into the in-patient institutions (including 500 children) and 31,880 people in need

⁵⁶ Main legislative and regulatory documents include: Decree of the Government of the RF of 27.07.1996 No 901 'On provision of privileges for the disabled people and families with disabled children on their provision with housing, on payment for housing and utilities'; Decree of the Higher Council of the RF of 06.03.1992 No 2464-1 'On regulation of payment for keeping children in the children's pre-school institutions and on financial support of the system of these institutions'; Decree of the Government of the RF of 18.07.1996 No 861 'On affirmation of the Order of upbringing and educating the disabled children at home and in private educational institutions'; Federal Law of 22.08.1996 No 125-FL 'On higher and post-graduate professional education'.

2. ⁵⁷ Decree of the President of the RF of 13.05.2008 No 774 'On additional measures of support of people who are taking care of the incapable to work citizens'.

of home-based care. Apart from the problem of shortage, another big issue is the quality of the services provided by the state.

The disabled people in Russia are faced with severe limitations in access to infrastructure, education and employment. However, it would be unfair to say that the Government does not pay attention to these issues. The problems of social exclusion of the disabled were addressed through several **Federal Targeted Programs**, such as ‘Social Support for the Disabled’ (2006-2010), ‘Family with disabled children’ within the program ‘Children of Russia’ (2007-2010), ‘Accessible Environment’ (2011-2015). The scope of measures is rather wide – from provision of access to schools to increasing of the number of television broadcasts with subtitles. For example, by 2015 20% of all general education schools in Russia should be able to provide an inclusive environment allowing for joint education of the disabled and ordinary children. Finally, another form of the state support to people with disabilities is financing of the associations and organizations of the disabled from the Federal Budget.

1.2.8 1.2.8 Scope and scale of social protection benefits

An indication of the coverage of the main social allowances and services is provided by **Annex Table 1** that shows absolute numbers of beneficiaries (in thousand people) and, if necessary, relative numbers (e.g. if the target group is households rather than individuals, limited by age, etc). As far as the cash allowances are concerned, in 2010 two programs with the highest coverage were *pensions* (27.9%) and *privileges* (20%). Both programs are targeted at the elderly. Yet it should be noted that a large amount of social assistance in Russia is provided under the category of social pensions. *Housing subsidies* were in the third place. In 2010 they were provided to 7.3% of Russian households. Given that the average household size is 2.6, the number of people covered by the program could be around 19%. While only 7% of the population received *child allowances up to 16(18) years*, in respect to the target group (children up to 16 years) the coverage of the program reached 43.5%, which is twice as high as the poverty headcount for children. The share of people in receipt of *state social assistance* does not exceed 2% (and this is a very generous estimate obtained by summing up the number of recipients of regular and lump-sum payments). Among all social allowances, *unemployment benefit* has the lowest coverage (1%).

Social care services are available to much smaller groups of the population. By far the most widespread type of social services is *institutional child care*, which in 2010 was available to 3.8% of the population or 59% of children under the school age. Other type of services targeted specifically at children is maintenance of *institutions* where they live permanently, including in-patient care institutions for children with disabilities, boarding schools for children with limited health capacities and institutions for orphaned children/children left without parental care. The total number of children living in these institutions in 2010 was 0.1% of the population. *Institutions of in-patient care* for the disabled adults and the elderly provided places to 0.2% of the population. Larger groups of the population attended *centres of temporary or day stay* for the disabled and elderly (0.4%) and were clients of the program of *home-based care* (0.8%). State services for homeless people are severely underdeveloped and are provided to less than 0.1% of the population.

Annex Table 2 shows the levels and structure of social protection related expenditure since 2005. In 2010 in relation to the GDP it accounted for 15% without health care expenditure and to 18.8% with health care expenditure.

The major part of the spending goes to pensions (about 50% or 9% of the GDP). Spending on social insurance allowances and a quasi-insurance *unemployment benefit* in total account for 1.5% of the GDP. Non-contributory social assistance programs account for 2.8% of the GDP, but most of these resources are spent on *privileges* (1.7% of the GDP) which are predominantly provided to the elderly population based on categorical principle.

All means-tested social assistance programs that are crucial for poverty reduction account in total just for 0.5% of the GDP. Among those, the most expensive one is a *social supplement to pension*, which accounts for 55% of the overall spending. 23% of the budget is spent on *housing subsidies* and 18% on *child allowances up to 16(18) years*. The cost of a *state social assistance* is estimated as 3.5% of the overall spending on means-tested programs. Noteworthy, the main burden of provision of all means-tested allowances remains with the Regional Budgets (although the Federal Budget co-finances housing subsidies and child allowances by means of intra-budgetary transfers), hence their generosity and coverage varies from region to region.

Finally, the cost of social services (including institutional care for children and the elderly) constitutes less 1.7% of the GDP.

1.3 1.3 Taxes

Distinction between federal, regional and local taxes depends on the level of legislature that is entitled to establish rates for that kind of tax. Federal tax rates are explicitly set by the Tax Code of the RF. The major federal taxes are: Social insurance contributions (before 2011 – a Unified social tax), Personal income tax, Value added tax, Tax on mineral resource extraction, Corporate profit tax, Excises⁵⁸. All regional and local taxes are asset-related: Property tax, Vehicle tax, Land tax and Tax on gambling businesses⁵⁹. Exact rates are set by regional (property, vehicles, gambling) or municipal (land) legislators within the Tax Code's framework. Some federal taxes such as the Personal income tax may be forwarded to regional budgets through intra-budgetary transfers; Corporate profit tax is split into federal and regional shares defined by the Tax Code. Below we describe the most important direct personal taxes.

1.3.1 1.3.1 Social insurance contributions to the state extra-budgetary funds

Social insurance contributions⁶⁰ are a financial obligation imposed on **employers** and the **self-employed** in order to obtain revenues required for providing pensions, social insurance allowances (including maternity, temporary incapacity⁶¹, unemployment) and health care. Contributions paid by employers are specified as percentage of the gross earnings of an employee. Contributions paid by the self-employed are defined as a percentage of the

⁵⁸ Other federal taxes prescribed by the Tax Code include a tax on animal and water wildlife, levied upon licensed hunters and fisheries, and a document tax, e.g. the ad valorem duty required to start civil litigation in state courts.

⁵⁹ From July 1, 2009 gambling in Russia is banned, except in four specially designated gambling areas in remote regions. Online gambling is banned.

⁶⁰ Federal Law of 24.07.2009 No 212-FL 'On insurance contributions to the Pension Fund of the RF, the Social Insurance Fund of the RF, the Federal Fund of Mandatory Health Insurance and Territorial Funds of Mandatory Health Insurance'.

⁶¹ Note that the *workplace accident insurance* is not part of the social contributions. Each employer must contribute to group accident insurance. The rate varies between 0.2 percent and 8.5 percent, depending on the type of business.

minimum wage. The self-employed are obliged to pay only pension and health insurance contributions, participation in other social insurance programs is voluntary. The same tax rates apply for employers and the self-employed.

Before 2009 social contributions were paid in the form of a Unified Social Tax (UST) with the tax rate of 26%. The UST had been introduced in 2001 and were subject to a series of reforms during the 2000s. Initially the tax rate amounted to 35.6% of the gross earnings. Simultaneously with the UST the unified Personal Income Tax rate of 13% was introduced in 2001. The main goal of the tax reform was to decrease the tax burden and reduce the shadow economy. As far as the Personal Income Tax was concerned the flat rate had worked well resulting in a substantial growth of the average wage. The regressive rate of the UST had contributed to that. In 2005 the UST was reduced to 26% for annual gross earnings below 280,000 Rubles, 10% for annual earnings from 280,000 to 600,000 Rubles, and 2% for the annual earnings exceeding 600,000 Rubles. However, in the last few years it became obvious that the Pension Fund runs a constant deficit, and in the upcoming years the ratio of the number of employed and the number of pensioners would have decreased. The pension reform was undertaken in order to create the second tier of the pension system and provide an opportunity for the employees to invest money in a funded element of pension. An attempt was made to promote payments of employees and employers to private pension funds. This goal was not reached. The economic crisis that started in 2008 demonstrated that it would be impossible to finance the further growth of pensions from the Federal Budget.

The Government claimed that the transfer of the burden from the state to the businesses would guarantee an uninterrupted payment of pensions in the nearest future. In 2010 it started to implement a large-scale reform that substituted the UST with *social insurance contributions to the extra-budgetary funds*. However, due to the economic crisis the decision was made to postpone an increase of the tax rate until 2011, so in 2010 the tax rates for employers under the general taxation scheme remained the same as in 2009. Starting from January 2011 the tax rate of 34% is applied to all employers irrespectively of a sector of economy, although for some categories of taxpayers the transition to the new tax rate of 34% will be conducted gradually and finalized in 2014⁶². Another innovation was the introduction of a two-step (instead of a three-step) system of taxation with the established upper limit of the tax base equal to 415,000 Rubles per year (or about 135% of the average annual wage). The gross annual earnings below 415,000 Rubles are taxed by the rate of 34%, while the wages exceeding this amount are exempt from social insurance contributions. The annual indexation of the tax scale by the wage growth rate is envisaged. Respectively, the upper limit is 2011 will be raised to 463,000 Rubles.

The new tax rates and their distribution by the extra-budgetary funds are presented in **Table 1.3.1**. The changes were aimed at increasing the revenues of the Pension Fund and the Mandatory Health Insurance Funds. The tax rate of the Social Insurance Fund remains the same.

Table 1.3.1 - Tax rate of social contributions in 2009-2011

Name of the fund:	Tax rate (%) in case of general system of taxation	
	2009-2010	2011

⁶² For farming corporations, payers of the Unified Agricultural Tax, for craft producers and communities of the thin ethnic minorities of the North engaged in traditional craft, for the residents of the special technological economic areas and organizations using the labour of the disabled (Article 58 of the Federal Law No 212-FL).

Pension Fund	20,0*	26,0**
Social Insurance Fund	2,9	2,9
Federal Fund of Mandatory Health Insurance	1,1	2,1
Territorial Funds of Mandatory Health Insurance	2	3
Total	26	34

Notes:

* In 2010 the distribution of 20% tax rate to the PF is as follows: for people born in 1966 and earlier 20% goes to the insurance element of the labour pension; for people born in 1967 and later 14% goes to the insurance element and 6% - to the funded element of the labour pension.

** Starting from 2011 the 26% contribution to the Pension Fund are to be distributed as follows: for people born in 1966 and earlier 26% goes to the insurance element of the labour pension; for people born in 1967 and later 20% goes to the insurance element, 6% - to the funded element of the pension.

Noteworthy, **mandatory workplace accident and professional disease insurance** is not part of social contributions and is to be covered by employers according to the established insurance rates that vary from 0.2 to 8.5% of the gross earnings depending on a type of economic activity⁶³.

1.3.2 1.3.2 Personal income tax

The taxpayers of **Personal Income Tax (PIT)** are individuals – residents of the Russian Federation and individuals – non-residents who receive income from the sources on the territory of the Russian Federation. In 2000 the major structural reform of a Personal Income Tax was conducted. Its main objectives were to increase the fiscal weight of the tax in the budget⁶⁴ and to stimulate the legalization of incomes, especially for the taxpayers with high income. The reform substituted the progressive income tax rate by a unified tax rate of 13%, reduced the number of tax benefits and simplified the procedures of paying and collecting the tax (see **Table 1.3.2**). State pensions and allowances are normally not taxable. Capital gains from asset sales are taxable only if the seller owned the asset for less than 3 years. A higher tax rate of 35% applies to some sources of income, e.g. bank interests that exceed the upper limit computed using a refinancing rate. However, interest rates are usually below the threshold, making interests tax free. For non-residents all types of income received on the territory of Russia are taxed at 30% rate⁶⁵. Dividends received by shareholders are subject to 9% tax.

Table 1.3.2 – Tax rates of personal income tax in the RF

Sources of income:	Personal income tax rate
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⁶³ Federal Law of 22.12.2005 No 179-FL ‘On insurance rates for mandatory social insurance in respect to workplace accidents and professional diseases in 2006’.

⁶⁴ For example, in 2000 in the majority of developed economies and in some of the most successful developing economies the share of income tax in the total sum of tax revenues amounted to 20-35%, while in Russia this share dropped to 6.5%.

⁶⁵ A foreign citizen is a tax resident of the Russian Federation if he/she resides on the territory of the Russian Federation no less than 183 days in the calendar year.

Main income (work for pay, contractor's agreements, housing lease)	13%
Bank interests above the threshold calculated using the refinancing rate of the Central Bank of the RF	35%
Amounts of economic gain on interest when the taxpayers receive borrowed funds in the part exceeding the established thresholds (except for the housing loans)	
Insurance premiums under voluntary insurance contracts in the part exceeding the established thresholds	
Lottery and gambling wins in the part exceeding the established thresholds	
All incomes received by the non-resident taxpayers	30%
Incomes from the share participation in the activity of organizations received in the form of dividends	9%

Tax returns are mandatory for the registered self-employed and professionals (lawyers, notaries, etc.), sellers of personal assets and recipients of other income. For taxpayers whose only taxable income comes from employment the PIT is withheld by the employer and there is no need to file a tax return, unless they want to claim a refund for **tax deductions**, the most important of which are listed below.

- **Standard tax deductions:**

- *for all categories of taxpayers* equal to 400 Rubles per each month of the tax period, is provided until the month in which the taxpayer's cumulative earnings exceed 40,000 Rubles. However, some categories of taxpayers (e.g. victims of nuclear accidents, war invalids, people with merits before the state, etc.) are entitled to a higher size of tax deduction irrespectively of their income level. In contrast to other tax deductions the amount of the standard tax deduction was not updated since 2001 and has become negligible due to high inflation. Say, in 2010 the employer on half the average national earnings⁶⁶ was eligible for the standard tax deduction just for one month and, respectively, his/her maximum gain equaled $(1 \cdot 400 \cdot 0.13 =) 52$ Rubles.
- *for each child under 18 years (24 years if the child is a full-time student).* Some important changes to this benefit came into effect in January 2009. The size was increased from 600 to 1,000 Rubles per child (2,000 Rubles for children of single parents and widowers⁶⁷). Taxpayers can use this benefit until the month in which their cumulative annual earnings exceed 280,000 Rubles (40,000 Rubles before 2009). In other words, after the increase of the upper limit an employee on average national earnings in 2010 could use the tax deduction throughout the year. The maximum gain from the standard tax deduction is $(1000 \cdot 0.13 \cdot 12 =) 1560$ Rubles per year for each of the working parents⁶⁸.

⁶⁶ The nominal earnings in Russia in 2010 were equal to 21,193 Rubles. See: Federal State Statistics Service data extracted from <http://www.gks.ru/wps/wcm/connect/rosstat/rosstatsite.eng/>.

⁶⁷ Parents of disabled children under 18 years and disabled children under 24 years belonging to disability groups 1 and 2 and studying full-time are also entitled to the double size of the standard tax deduction.

⁶⁸ Basically, each child is entitled to a double amount of tax deduction (if the child is not entitled to preferential deduction) and the family can choose which parent will receive it. This is beneficial for families where one of the

- **Social tax deductions:**
 - on *charity related expenses*, equal to the actual expenses over the year, but no more than 25% of the taxpayer's annual income.
 - on *expenses related to education* of taxpayers, equal to actual expenses over the year, but no more than the upper limit. However, there is an additional tax deduction for *the taxpayer's children* (including brothers/sisters) under 24 years or fostered children under 18 years if they study full-time. The size of the deduction equals actual expenses, but there is an upper limit of 50,000 Rubles per year per each child.
 - on *health care expenses* of the taxpayer, his/her spouse, parents and children under 18 years, made in national medical institutions (according to the list approved by the Government), including expenses on medicines prescribed by a doctor and premiums paid under voluntary health insurance programs. The size of the deduction equals the actual expenses, but no more than the upper limit.
 - on *premiums paid under voluntary pension insurance agreements and additional contributions to a funded element of the state old-age pension* of the taxpayer, his/her spouse, parents and disabled children, equal to actual expenses, but no more than the upper limit.
 - The sum of all social tax deductions (including education of the taxpayer, health care costs and pension insurance agreements, but excluding education of taxpayer's children and expensive health care) cannot exceed 120,000 Rubles in the calendar year⁶⁹.
- **Property tax deductions**, mainly related to the purchase and sale of housing.
- **Professional tax deductions**, related to expenses directly involved in the generation of incomes.

1.3.3 1.3.3 Scope and scale of taxes

Annex Table 3 shows the structure of tax revenues. Revenues from *social insurance contributions* and *VAT* are the largest (22% of total revenues in 2010). *Personal income tax* and *corporate income tax* account for 16% of total revenues each. The share of *natural resource extraction tax* amounts to 13%. *Excises, property taxes* and *unified taxes on total income* in total account for 12% of revenues. The share of *personal income tax* has been increasing since 2005 due to income growth (the marginal tax rate remained the same). An increase in the share of personal income tax in 2009 was due to falling revenues from corporate and natural resources extraction taxes when imports were hit by the world economic crisis.

parents have lower income – in this case the threshold of eligibility will be achieved later. In addition, the double amount of the deduction is now granted to unmarried parents only if the other parent has abandoned the parental rights or has been deprived of parental rights, or if in the child's birth certificate only one parent is indicated (previously all unmarried parents were considered as single parents).

⁶⁹ The cost of expensive health treatment can be fully deducted from the tax base.

2. 2 CONSTRUCTING THE MICROSIMULATION MODEL FOR RUSSIA

The Russian tax-benefit system consists of numerous types of support available to a large circle of beneficiaries; they are regulated by a number of legislative acts that focus on certain types of assistance rather than on vulnerable groups. Moreover, after the decentralization reform carried out in 2005 the budgetary spending on social protection is mainly administered at the regional level. This motivated the regions to implement their own social programs that differ in terms of design and generosity. However, little is known about the impact of the tax-benefit policies on income distribution and poverty in Russia. Due to the overall complexity of the system the available studies focused on impact assessment of separate instruments, such as child and maternity benefits (Ovcharova et al., 2007, Ovcharova and Popova, 2005, Denisova et al., 2000).

So far, there was just one attempt to construct a full-scale tax-benefit microsimulation model (MSM) for Russia within the UNU/WIDER project⁷⁰. The model was based on the expenditure data for 2000 wave of the Russian Longitudinal Monitoring Survey (RLMS) and simulated tax liabilities for the indirect Tax Code, unemployment benefit, child allowance and housing subsidies. The user could only modify existing benefits, but could not add new ones. Other benefits, social insurance contributions and personal income tax were not simulated. The model was applied to assess the distributional consequences of the two indirect taxes (VAT and excises) (Decoster and Verbina, 2003).

Therefore, there is a need for a microsimulation model that: (1) captures all the complexity of the Russian tax-benefit system, (2) is flexible so that users are able to alter policy parameters and build in new policies, (3) can be used in a cross-national analysis of policies; (4) can potentially become a platform for analyzing behavioral change due to policy reforms. All the abovementioned requirements are met by EUROMOD.

EUROMOD is based on a generalised model building platform MMEANS. The programming language is C/C++, with input data (household micro-data) stored in MS Access databases and all other input parameters (policy rules) stored as spreadsheet tables that can be read and manipulated with any spreadsheet software. The outputs of simulation (monetary amount of the simulated instruments, measures of disposable income, etc.) are written to a micro-output data files containing all variables of interest. The latter can be used with statistical packages, such as Stata and SPSS, for performing more elaborate analysis. The construction and development of EUROMOD is documented in a number of working papers (Immervoll and O'Donoghue, 2001b, Lietz and Mantovani, 2006, Sutherland et al., 2008, Sutherland, 2001). The EUROMOD platform has already been successfully used as a platform to build a microsimulation model for South Africa (Wilkinson, 2009). The model construction process is currently underway in Serbia.

2.1 2.1 Policy rules

2.1.1 2.1.1 Scope of simulation

The aim of building the Russian MSM was to simulate as many existing policies as possible. However, due to the data constraints not all the taxes and benefits mentioned in **Section 1** are simulated by the model:

⁷⁰ The model is available on-line: http://www.wider.unu.edu/darts_web/splash.php

- Some policies are beyond the scope of the model entirely or there is little or no data for that purpose, hence they are neither included in the database nor in its output income variables. This refers to all indirect taxes and in-kind benefits (free or subsidized healthcare, child care and other social services). Theoretically these elements can be accounted for within the model framework, as was demonstrated by a special EUROMOD project⁷¹. However, they have been neglected, at least temporary, to limit complexity and to keep model building a manageable task.
- All lump-sum allowances are excluded since they do not affect permanent income of a household.
- Some allowances are included in the database and may be chosen as components of output variables, but the rules governing them may not be changed by the model. Those are benefits that depend on a contribution history, like *pensions*, *privileges*, *unemployment benefit* and *temporary incapacity benefit*.
- Some allowances are simulated with certain simplifications. *Maternity leave allowance* and *child care allowance up to 1.5 years* require the exact data on contribution history which are missing. *State social assistance* is often provided at discretion of local authorities, so there is no guarantee that eligible people receive the benefit.
- Variables that are simulated precisely comprise *employer social insurance contributions*, *personal income tax*, *compensation of charges for institutional child care*, *child allowance up to 16(18) years* and *housing subsidy*.

Annex Table 4 classifies each of the main tax-benefit policies into one of these groups and provide a brief explanation as to why the instrument is not fully simulated if this is the case.

2.1.2 2.1.2 Simulated policies and order of simulation

Table 2.1 presents the order of simulation in the model. The table is extracted from the parameter sheet *spine_rf*. *SIC* are simulated first, as they are defined as a percentage of withholding income tax base. All social benefits are not subject to taxation; hence they are simulated after the *personal income tax*. *Maternity leave allowance* and *child care allowance up to 1.5 years* are included in any means-test, hence simulated first. Eligibility for means-tested benefits is derived from comparing disposable family/household income with a poverty line (Subsistence Minimum Level), which is simulated before means-tested benefits. Means-tested allowances have to simulated in that particular order because means-test for a *state social assistance* takes account of a *child allowance up to 16(18) years*, while means-test for a *housing subsidy* includes a *state social assistance* allowance.

Table 2.1 – The order of simulation in RUSMOD

Policy	Description	Main output
ConstDef_rf	Policy constants ⁷²	
tscer_rf	Employer social insurance contributions	tscer_s

⁷¹ FP6 Specific Targeted Research Project on ‘Accurate Income measurement for the Assessment of Public Policies’ (AIM-AP).

⁷² This sheet contains monetary values that are used by more than one policy.

tscse_rf	Self-employed social insurance contributions	tscse_s
Tin_rf	Personal Income Tax	tin_s
bmapr_rf	Maternity allowance	bmapr_s
bmacc_rf	Child care allowance up to 1.5 years	bmacc_s
bcc_rf	Compensation of charges for pre-school institutions	bcc_s
sml_rf	Subsistence minimum level	sml_s
bch_rf	Child allowance up to 16(18) years for poor families	bch_s
bsa_rf	State social assistance to the poor	bsa_s
bho_rf	Housing subsidy	bho_s

Social contributions

Social insurance contributions (SIC) are paid by employers on behalf of employees and by the self-employed. Social insurance is highly centralized, contributions are formally rates set by the Federal laws. Contributions are paid directly into the four relevant extra-budgetary funds. Federal and Regional Governments cover the cost of social contributions for certain categories of the population, e.g. the unemployed, the disabled, mothers without employment record, etc.

Social contributions apply to the withholding personal income tax base (i.e. earnings and income from self-employment). Employment income below 415,000 Rubles is taxed at 26% rate, while income exceeding this amount is exempt. Contribution rates are as follows: 20% of employment income goes to the Pension Fund (*tscerpi_s*); 2.9% – to the Social Insurance Fund (*tscersi_s*); 3.1% – to the Federal and Territorial Funds for Mandatory Health Insurance (*tscerhl_s*). Total employer contributions are computed as: $tscer_s = tscerpi_s + tscersi_s + tscerhl_s + tscerthl_s$.

The size of contributions for the self-employed is determined as follows:

$$\text{Cost of annual insurance} = \text{Minimum Wage} * \text{SIC Rate} * 12,$$

where tax rate is the general contribution rate for the relevant extra-budgetary fund.

In 2010 a monthly minimum wage amounted to 4,330 Rubles (see *constdef_rf*). Hence, monthly social contributions by the self-employed to the Pension Fund (*tscsepi_s*) were equal to $(4,330 * 20\%) = 866$ Rubles; while contributions to the Federal and Territorial Health Insurance Funds (*tscsefhl_s*) were equal to $(4,330 * 3.1\%) = 134.23$ Rubles. Total social contributions by the self-employed are defined as: $tscse_s = tscsepi_s + tscsehl_s$.

Personal income tax

Income taxation in Russia is individualized; however some of the tax deductions use other tax units. We differentiate between *withholding income tax* and *final income tax*. The former is the amount of an employee's pay withheld by employer and sent directly to the Government as partial payment of income tax. For the latter the liability is based on the final tax report submitted at the end of each tax year (in April). For the purpose of simulation of a *maternity*

leave allowance, a *child care allowance up to 1.5 years* and a *child allowance up to 16(18) years* we need to know net employment income and therefore withholding income tax. Tax base for the latter is narrower than for the final tax liability, e.g. it does not include investment income, such as bank interests, dividends and rent. The final income tax base is used to determine eligibility for two means-tested programs – a *state social assistance* and a *housing subsidy*.

All social benefits (including scholarships) are not taxable. We also assume that income from occasional jobs is unlikely to be taxed. There are two types of tax allowances that are used to reduce the withholding income tax base. Both are non-refundable, i.e. their value cannot be larger than income tax base (*ils_tinwh_BaseY*):

- A standard tax allowance for each taxpayer (*tintawhs_s*) equals 400 Rubles per month and is provided until the month in which cumulative employment income of a taxpayer reaches 40,000 Rubles.
- A standard tax deduction for taxpayer's children up to 18 years (or 24 years if are studying full-time) (*tintawhc_s*). All taxpayers are eligible until the month in which their cumulative employment income reaches 280,000 Rubles. The size of allowance depends on family type. In 2010 two-parent families are entitled to 1,000 Rubles per month, one-parent families were entitled to a double size of the allowance – 2,000 Rubles per month.

Withholding income tax base (*ils_tinwh_BaseY*) is defined as follows:

$ils_tinwh_BaseY = ils_earns$ (employment income and income from self-employment) - $tintawhs_s$ (standard tax deduction for each taxpayer) - $tintawhc_s$ (standard tax deduction for taxpayers' children).

Final income tax base takes into account several additional sources of income for which different tax rates apply:

- Bank interests (*iyit*) are normally taxed at the rate of 13%. However if they surpass the specified upper limit (as defined using the refinancing rate of the Central Bank) a higher tax rate of 35% applies. Since we do not know the exact amount of interests received we assume that they are taxed at standard 13% rate.
- Dividends (*iydv*) are taxed at the rate of 9%.
- Income from housing lease (*ypr*) and sale of property and shares (*ylstx*) given that they were in property of a taxpayer for at least 3 years is taxed at the standard 13% rate.

There are deductible expenditures (related to charity, education of a taxpayer and his/her children, health care and contributions to the voluntary pension funds). Those are not simulated in the current version of the model due to lack of detailed information about expenditure in the previous year.

The final income tax (*tin_s*) is calculated as:

$Tin_s = tinwh_s$ (withholding income tax) + $tinktdt_s$ (tax on bank interests) + $tinktdv_s$ (tax on dividends) + $tinktp_r_s$ (tax on income from housing lease) + $tinktls_s$ (tax on lump sum income from selling property or shares)

Maternity leave allowance

A maternity leave allowance (*bmapr_s*) is proportional to mother's net earnings for the last 12 months preceding the leave and is covered from the Social Insurance Fund. However, the database only contains responses about earnings over the last month and average monthly earnings over the last 12 month preceding the survey. Hence, in order to be eligible a woman with her own children (*tu_maternity_rf*) had to report one of those.

The allowance is paid for 140 days (70 days before the child birth and 70 days after). Since we do not have information about current pregnancies, the eligible women are those with own children up to 3 months of age (*tu_maternity_rf*). The monthly size of allowance equals 100% of monthly earnings net of withholding income tax, with an upper limit of 34,583 Rubles per month.

Child care allowance up to 1.5 years

There are two types of a child care allowance (*bmacc_s*) – contributory and non-contributory. The latter was introduced in 2007. In both cases the unit of analysis is mother with her own children (*tu_childcare_rf*).

Contributory allowance is proportional to mother's net earnings for the last 6 months preceding the leave and is covered from the Social Insurance Fund. The problem with reporting of earnings for simulation of a maternity benefit applies here as well. Women who are in receipt of a *maternity leave allowance* are not eligible, as the two allowances cannot be claimed simultaneously. The monthly size of child care allowance equals 40% of net earnings with an upper limit of 13,833 Rubles. The lower limits are 2,060.4 Rubles for the first child and 4,120.8 Rubles for the second and subsequent children.

Non-contributory allowance is provided to all women who did not have any earnings over the last 6 months and is covered from the Federal Budget. The monthly size equals 1,798.5 Rubles for the first child and 3,597 Rubles for the second and subsequent children.

Compensation of charges for pre-school institutions

Compensation of a part of charges is provided to all families with children attending pre-school institutions (*bcc_s*). It is financed from the Federal Budget through subsidies to the Regional Budgets. The unit of analysis (*tu_prescomp_rf*) is a nuclear family with children up to 18 years or up to 23 years if they are studying full time. The size of compensation is proportional to actual fees paid by parents and amounts to 20% for the first child, 50% for the second child and 70% for all subsequent children.

Subsistence Minimum Level

A separate sheet calculates the value of a regional poverty line (Subsistence Minimum Level) that is necessary to compute all means-tested allowances (*sml_s*). In each region the value of SML is calculated separately for three socio-demographic groups – children up to 16 years, persons of working age (men 16-59 years, women 16-54 years) and persons of pension age (men 65+ years, women 55+ years). We are using the SML values for the 4th quarter of 2010. The code is repeated for 32 regions covered by the RLMS-HSE sample.

Child allowance up to 16(18) years for poor families

A monthly means-tested allowance is paid to families with children below 16 years (or 18 years if they are in full-time education). Means-test is applied to the sum of parents' net

earnings, scholarships, pensions and alimonies (*il_CB_mt*). We are using amount received over the last month, although originally the documents for the last 3 months should be supplied.

The unit of analysis for this allowance is family (*tu_CBfamily_rf*) consisting of the head, spouse/cohabiting partner and children under 16 years (or under 18 years if studying full-time)⁷³. Eligible children living in the household, but without parents, are also counted as dependent children. The benefit is paid monthly to one of the parents.

The size of allowance (*bch_s*) is set at the regional level, hence the allowance has to be calculated separately for each of the 32 regions available in the database⁷⁴. We opted for including 5 categories of families that are differentiated in most of the regions and are large enough to be detected in the sample: two-parent families, single mothers⁷⁵, large families (families with 3+ children), families with disabled children and families with disabled parents.

State social assistance

State social assistance (*bsa_s*) is a means-tested allowance targeted at poor households and households in hard life situation. This program is left at full discretion of regional authorities and there is no minimum federal standard of service provision. Among the 32 regions represented in the input data, the regular cash allowance for the poor households is provided only in 17 regions, while in other 15 regions the size and duration of payments vary depending on the budget availability. Hence, the simulation is carried out for those 17 regions only, in the rest of regions the function is switched off.

As far as means-testing is concerned, the regions that have established a monthly allowance follow the federal guidelines quite closely, with few exceptions. Means-test is applied to total household income from all sources, including net earnings, net investment income and income from lease, pensions, scholarships and other social allowances (*il_SSA_mt*). Originally income has to be averaged over the 3 preceding months, which we cannot do due to data constraints. The tax unit includes all family members living at the same address and sharing income⁷⁶, most typically the household (*tu_household_rf*). Minor deviations from these rules are not simulated for the sake of transparency of the model.

The most common eligibility rule is that the total household income should be below the (fraction) of a regional poverty line (SML) for the reasons that could not be prevented by the family. Basically, this means that all people of working age should provide a justification if they are currently not working and not looking for a job (i.e. economically inactive). The

⁷³ For Moscow-city the assessment unit is a family with children under 18 years (*tu_CB2family_rf*).

⁷⁴ The data source is statistical form for June 2010 uploaded on the website of the Ministry of Health and Social Development: <http://www.minzdravsoc.ru/docs/mzsr/insurance/3/>. In some regions the data for certain categories of recipients were missing and had to be restored by means of looking into the regional legislation.

⁷⁵ According to Article 51 of the Family Code a single mother is a woman who had given a birth and is bringing up a child and is not married. Also in the birth certificate of a child the name and surname of the father is written according to the words of the mother. Hence, the father of the child does not have any rights and responsibilities in respect to the mother and the child.

⁷⁶ Non relatives may or may not be included at discretion of a social protection office. In simulation we opted for keeping them in.

target group may be additionally narrowed down to certain categories of the population that are considered to be the most vulnerable in that particular region (e.g. lone mothers, pensioners living alone, families with the disabled members). The size of allowance is usually defined by subtracting the total household income (averaged over the previous 3 months) from the (fraction of) SML for that household. In some cases the size of allowance is set as a fixed amount per family member. It is not uncommon to define upper and lower limits. The three examples below illustrate the regional variation in the policy rules for this allowance.

In Moskovskaya Oblast (*drg00=50*) a monthly size of allowance equals 50% of the difference between the cost of the household poverty line and actual household income. Additionally, there are lower and upper limits: the monthly allowance cannot be below 300 Rubles per person and cannot exceed 1,000 Rubles per person. Another example is Komi Republic (*drg00=11*), which has introduced a Guaranteed Per capita Cash Income (GPCI) – a cash amount to be provided monthly to persons whose per capita family income is below the regional poverty line. The size of GPCI is updated on a quarterly basis. The region has also introduced a stricter means-test by excluding from the number of beneficiaries those households who are poor due to the fact that their working age members are economically inactive or working part-time. In Volgogradskaya Oblast (*drg00=34*) the fixed amount is paid per each member of the household whose income is below the regional SML, however the number of eligible households is limited by the following categories: families with the disabled or the elderly, families with children under 16(18) years and all people living alone if they are not in active working age.

Housing subsidy

This is a means-tested benefit created in order to assist low-income households with meeting the costs of rent and utilities (*bho_s*). Means-test is applied to the total household income (*il_HS_mt*) from all sources, including net earnings, net investment income and income from lease, pensions, scholarships and all other social allowances (both taken from the data and simulated). The assessment unit includes all people registered at the same address and sharing the costs of rent and utilities⁷⁷. Due to lack of data on registration status of household members, the tax unit used in simulation is a household (*tu_household_rf*). As it will be shown later, this might be the reason for over-estimation of the number of eligible households.

The computation formula for a housing subsidy is quite complicated and includes a number of household level conditions and regional level conditions. The household level conditions include: household income (*il_HSfamily_rf*); actual costs of rent and utilities (*xhc00*); a size of privileges for rent and utilities (*bhopr*). Based on these parameters we calculate two indicators for the whole sample to be used in the actual formula. The first one is an adjustment coefficient for privileges (*AC_hp*). It is computed as a ratio of the cost of rent and utilities without privileges and the cost of rent and utilities with privileges. In other words, the higher the privileges are the lower the coefficient is, and if household does not have any privileges, the coefficient equals '1'. The second coefficient is an adjustment coefficient for the poor

⁷⁷ Some household members may be declared non-eligible and their share of the subsidy may be withheld when the total subsidy is paid. Those are the persons of 18+ years who are economically inactive without a good reason. Good reasons include: being a pensioner; being unemployed; being a mother taking care of children up to 3 years or a mother with 3 and more children up to 14 years; being disabled or taking care of disabled or ill household member; being up to 23 years old and studying full-time. This condition is not simulated in the current version to keep the formula less complex.

(*AC_poor*), calculated as a ratio of per capita household income and per capita household SML.

Another crucial part of the benefit formula is the social standards in the area of housing that are determined by the regional legislation. Since they vary from region to region, we have to run the next part of the code separately for each of the 32 regions represented in the input database.

The size of allowance is computed as follows: (social standard of living space*N of persons in the household * social standard of the cost of rent and utilities per 1 sq.m * adjustment coefficient for privileges) - (household income * maximum share of the cost of rent and utilities in household income). For poor households, i.e. those whose income is below the regional SML, the formula has to be additionally multiplied by an adjustment coefficient (*AC_poor*). Social standards of a living space are set separately for households of different size (see *DefCost_rf*): 33 sq.m for persons living alone; 21 sq.m per person for households with 2 members; 18 sq.m per person for households with 3+ members. Hence, the formula is repeated for 6 household types, differentiated by two criteria – poor/non-poor and one/two/three-person household. Finally, the formula provides that a subsidy is only available if the household has no debts for rent and utilities and that the size of a subsidy cannot exceed the actual cost of rent and utilities.

2.2 2.2 Data

An important step in building a tax-benefit MSM is choosing an appropriate data-set and preparing the data for use in the model. In order to be used within the EUROMOD framework the data have to meet certain requirements (Figari et al., 2007). Essentially, the survey must be a recent, representative sample of households, large enough to support the analysis of small groups and it must contain individual level information on demographic characteristics, within-family relationships, labour market status, primary income by source, social benefits (especially those that cannot be simulated), and also expenditure and other relevant characteristics that may affect tax liabilities or benefit entitlements. A number of household surveys have been considered for that purpose, including the Household budget survey (HBS) and the Gender and Generation Survey (GGS), the Russian Longitudinal Monitoring Survey (RLMS-HSE)⁷⁸. However, the latter was the only survey that fulfilled all the essential conditions for as a potential dataset for a tax-benefit MSM and, therefore, was selected as an input dataset for RUSMOD. RLMS-HSE is a nationally representative longitudinal survey which was tailored to deliver consistent measures of individual income and consumption. Data have been collected fifteen times since 1994, most recently in 2010.

2.2.1 2.2.1 General description

The RLMS-2010 data was collected through face-to-face interviews with the household and all household members aged 16 years and more. *Individual questionnaire* contains questions about respondents' demographic characteristics, health, employment, education, individual sources of income (earnings, pensions, social benefits, etc.). *Household questionnaire* contains questions about the household composition, household-level sources of income (e.g. family benefits, private transfers), expenditure, subsistence farming, living conditions, assets (e.g. second housing, durable goods, land plots), self-assessment of the economic well-being.

⁷⁸ <http://www.hse.ru/en/rlms/>

Data on taxes are not collected. Relevant community-level data, including region-specific prices and community infrastructure data are collected in a separate *Community questionnaire*.

Table 2.2 – Input database description

Year	2010
EUROMOD database	rf_base_2010
Original name	Russian Longitudinal Monitoring Survey (RLMS-HSE)
Provider	National Research University - Higher School of Economics
Year of collection	2010
Period of collection	October-December 2010
Income reference period	typically income and expenditure for the month preceding the survey, for some types of expenditure - 3 months preceding the survey
Sampling	A three-stage stratified clustered probability sample of dwellings
Unit of assessment	Household (people living together and sharing income and expenses)
Coverage	Permanent residents, people living in institutions are excluded
Sample size	21,343 individuals; 7,923 households (total sample including the panel part)
Response rate for household description	80% (60% in Moscow and St-Petersburg)
Final sample used in the model	16,867 individuals; 6,323 households

The general population are households of permanent residents. Persons living in institutional households (children’s homes, care homes, convents) are excluded. Household is the group of persons living in the same dwelling (at the same address) and sharing income and expenses. They do not necessarily have to be related by family ties. A household may consist of one member only. It may also comprise one or more ‘benefit units’, e.g. several nuclear families living together in a three-generation household.

2.2.2 2.2.2 Sample quality and weights

RLMS-HSE uses a three-stage probability sample drawn from the population of dwellings. At first two stages selection is carried out using the ‘probability proportional to size’ (PPS) method. From among 1,850 districts (containing 95.6% of the population⁷⁹), three very large population units are selected with certainty: the city of Moscow, Moskovskaya Oblast and St-Petersburg. The remaining districts are allocated to 35 equal-sized strata with about 100

⁷⁹ Some remote areas are not included. Chechenskaya Republic was eliminated because of the armed conflict.

households in each. At the second stage, within each selected PSU the population is stratified into urban and rural substrata, and the target sample size is allocated proportionately to the size of two substrata. Finally, the required number of households (10) is drawn systematically from the lists of dwellings within each SSU. Interviewers are required to visit each selected dwelling up to three times to secure the interviews. Substitutions of any sort are not allowed. If interviewer identifies more than one household in the dwelling, he/she is obliged to select only one using a Kish selection procedure. On average the household response rate exceeds 80%. The response rates vary across PSUs and are substantially lower in Moscow and St-Petersburg (less than 60%). This was anticipated at the design stage, and initial allocations to these strata are increased to offset expected losses from refusal and non-contact.

The original 2010 dataset given to researchers included 7,923 households (21,343 individuals), which had completed interviews. These data contain some households that moved out of the sample area, but were located and interviewed for the purpose of longitudinal analyses. They are not part of the cross-sectional representative sample (variable *origsam*=1) and were excluded from the input data, resulting in the final dataset of 6,323 households and 16,867 individuals.

Due to the fact that RLMS-HSE attempts to interview all individuals within the household, the sample constitutes a proper probability sample of individuals as well as of households, without any special weighting. However, the data set contains weights that adjust the cross-sectional sample not only for design factors (sampling probabilities and non-response), but also for deviations from the census characteristics. For simulation purposes we have additionally computed the *grossing weights*. In other words the weights provided with the original data were scaled up to the overall population (**Table 2.3**). They were calculated as the ratio of population to sample counts for subgroups defined by household size (1,2,3,4,5+ members) and location of residence (urban or rural). Population totals are taken from the 2010 census. Applying weights to gross the numbers up to population figure gives 54,402,000 households and 137,454,310 individuals.

Table 2.3 – Descriptive statistics of the grossing-up weight

	rf_base_2010
Number	16,867
Mean	8,149.3
SD	1,429.6
Maximum	11,617.8
Minimum	5,612.8
Max/Min	2,1

2.2.3 2.2.3 Imputations and assumptions

The main adjustments made to the original RLMS-HSE data included: (1) imputation of user-missing data; (2) adjustment of earnings and (3) imputation of gross income.

Some households and individuals did not provide full information about their earnings, income or expenditure, or other important variables by choosing answers *Don't know/Refuse to answer*. These responses were recoded into -1 and, if reasonable, imputed using median values (median values at the regional level were used if the sample was big enough). Some

households reported zero income or expenditure, however the reference period is one month, there were no justification for omitting or imputing those observations.

The original variables on earnings could not be used for the purposes of tax-benefit simulation, because some employees reported that they did not have formal contracts and some self-employed reported that they were not registered with the state authorities. For the purpose of microsimulation of taxes and benefits, informal earnings had to be set to zero. Among the employed the share of those without formal contract was equal to 6.6% at the main job and 32% at the second job. For the self-employed the share of those working without registration was 17.2% at the main job. Similar information about the second job of the self-employed was not collected. Finally, over 80% of people who had occasional jobs worked without a formal contract. When earnings of informal workers are set to zero, the resulting variables are called *yemf100* (formal employment income) and *ysef100* (formal self-employment income). These variables are used in all simulations of taxes and benefits⁸⁰.

The data on taxes were not collected in the survey, therefore they had to be imputed and added to net after-tax income. The imputation of gross income is carried out according to the inversion of rules (Immervoll and O'Donoghue, 2001a). Inversion is rather straightforward due to the fact that Russia has constant marginal tax rate. All income sources presented in the original data are grouped according to their income tax treatment: (1) income on which income tax is withheld at the tax rate of 13%, including employment income, income from interests on bank deposits⁸¹, income from housing lease, lump sum income from sale of property and shares; (2) income on which income is withheld at the rate of 9%, namely income from dividends. Based on the information above, income before income tax can be directly calculated using the following formula:

$$\text{Gross } Y_x = \text{net}Y_x / (1 - tx), \quad [1]$$

where tx is the tax rate.

For interests, dividends, housing lease, lump sum income the net values were simply scaled up using the formula above. Employment income was treated similarly, only before scaling up the standard tax allowances were subtracted (see **section 2.3.2**).

No time adjustment was necessary. In the EUROMOD framework all monetary amounts should be expressed in monthly terms. In our input data the reference period of socio-demographic, labour, economic characteristics is a month of the survey, while information on income and expenditure refers to a previous month⁸². Another time related requirement is that the data set used should relate to a time point as close as possible to the time point of the tax-

⁸⁰ Note that total earnings, including informal, though not taken into account in any policy simulation, may still be included in household disposable income. The variables are called *yem00* (total employment income) and *yse00* (total self-employment income).

⁸¹ Those may be subject to higher income tax rate if interests exceed a threshold established by the Central Bank. However, we do not have any information regarding the actual interests received by the household, hence we have to assume that all income from interests are taxed at the standard rate.

⁸² In all simulations it is implicitly assumed that income is received at the same rate throughout the year. However this may not be the case for some households. In particular, simulated income tax (based on annual income) does not take account of changes that may happen during the year.

benefit rules that are fed into the model. In the current version of the Russian model the policy parameters are modeled for the same year in which the micro-data were collected (2010).

3.

4. 3 VALIDATION

4.1 3.1 Alternative scenarios of simulating the policy system

Validating model output against the other sources of data (official statistics, national accounts, other household surveys) is a useful test of the robustness of a MSM. As it will be clear from the report on validation exercises in the next section, using the formal earnings (i.e. after deducting the informal part of earnings) and other self-reported income from the original data results in over-estimates of the means-tested benefits and, consequently, under-estimates of poverty and inequality. There were three ways to deal with this situation: (1) imputation of ‘hidden’ earnings, (2) imputation of ‘hidden’ household income and (3) a non take-up correction for the means-tested benefits. The various combinations of these three procedures resulted in eight policy scenarios listed in **Table 3.1**.

Table 3.1 - Various scenarios of the policy system, 2010

Name of the system:	Earnings adjustment	Household income adjustment	Non take-up correction
rf_base1_2010	No	no	No
rf_base2_2010	Yes	no	No
rf_base3_2010	No	yes	No
rf_base4_2010	Yes	Yes	No
rf_base1_nt_2010	No	No	Yes
rf_base2_nt_2010	Yes	no	Yes
rf_base3_nt_2010	No	Yes	Yes
rf_base4_nt_2010	Yes	Yes	Yes

The **imputation of ‘hidden’ earnings** may be justified by the fact that RLMS-HSE sample underestimates employment level by 6 p.p. compared to the official statistics. This situation is quite typical for the longitudinal surveys due to the sample attrition – the most active people and well-off households are less likely to be interviewed. This results in underreporting of actual earnings in the survey. Another problem is that earnings in Russia are highly volatile. The specific feature of the Russian labour market is that the demand and supply are balanced by using flexible mechanisms of labour remuneration rather than by releasing the redundant labour force. The high flexibility of earnings together with the quite stable employment rate stimulates the development of non standard forms of labour remuneration which remain

beyond the statistical observation. According to special surveys carried out by the National statistics agency around 40% of earnings are hidden from statistics⁸³.

By FSSS estimates, in the 4th quarter of 2010 the average net monthly earnings, including the hidden part, amounted to 20,437 Rubles. This is 1.31 times as high as the net monthly earnings from formal employment according to the RLMS-HSE. Therefore, the original net formal earnings (*yemfl00* and *ysefl00*) need to be multiplied by 1.31 in order to arrive at the estimates of earnings that are compatible with those from the National accounts⁸⁴. The resulting variables are called *yemfl* and *ysefl*, respectively.

Another problem is underreporting of investment income and income from property lease. For example, 8% of households in the sample reported having a second flat, but only 4% reported receiving income from property over the last 12 months. The Russian statistics agency employs imputation procedures to adjust for the income underreporting. The main source of data on living conditions of the population is the HBS carried out on a quarterly basis. Basically, the data on income are considered unreliable and are not collected at all. In National accounts the total population income is measured as the sum of consumer expenditure and monetary equivalent of home production reported in HBS, plus the amount of savings in the form of bank deposits and foreign currency purchased by the population. As a result, mean income is inflated by approximately 20%.

We have also applied an imputation procedure to our income data. A special function in the tax-benefit model is used to **impute the 'hidden' income**. To arrive at this estimate all the components of income, including employment income, pensions, social benefits, private transfers, investment income and lump sum income are summed up. This sum is then deducted from the household expenditure. If the result of the function is higher than zero it is treated as 'hidden' income (*yad_s*). For 17% of Russian households the reported expenditure appeared to exceed the reported income. The share of those with underreported income ranged from 15% in the bottom income decile to 25% in the top decile. On average the imputed amount was equal to 20% of the total household income (from 19% in the bottom income decile to 30% in the top decile). The 'hidden' income can be taken into account in the means-test for a *state social assistance* and a *housing subsidy*. Given that the information on the household assets reported in the survey is limited compared to the information available to local Social assistance offices and given the positive correlation between assets and hidden income, the income imputation enables us to carry out a more precise means-test.

The third way to correct for the over-estimation of means-tested benefits is by applying a **non take-up correction**. The non take-up might happen due to the lack of knowledge about the available social programs on the side of a household, absence of need or complicated application procedures, etc.

Table 3.2 - Non take-up probabilities for the means-tested allowances, 2010

⁸³ Noteworthy, only a part of hidden earnings can be classified as 'shadow' income. Another part is constituted by earnings of those employed in medium and small businesses.

⁸⁴ Although FSSS applies a more advanced adjustment method, it also assumes that the probability of underreporting of earnings does not differ across the deciles.

	Ratio of the actual and simulated shares of recipients
Child allowance up to 16(18) years	
rf_base1_nt_2010, rf_nt_base3_2010	0.68
rf_base2_nt_2010, rf_base4_nt_2010	0.98
State social assistance	
rf_base1_nt_2010	0.26
rf_base2_nt_2010	0.37
rf_base3_nt_2010	0.51
rf_base4_nt_2010	0.71
Housing subsidy	
rf_base1_nt_2010	0.30
rf_base2_nt_2010	0.40
rf_base3_nt_2010	0.46
rf_base4_nt_2010	0.57

The reasons for non-take up might vary depending on the program. For example, the program of a state social assistance which is fully regulated at the regional level is often provided at the discretion of local authorities. The eligibility for a housing subsidy is calculated on the basis of the number of people registered at the address which was not collected in the survey. In sum, the take-up proportions for each means-tested program are computed by comparing the number of recipients according to the administrative records and the number of recipients simulated using this particular scenario assuming 100% take-up. Hence, if the number of recipients is higher according to the simulation, we assume that a part of the eligible households did not apply and did not receive a benefit.

Take-up probabilities are applied at the household level (so that people entitled to the same benefits within a household exhibit the same take-up behaviour), for each benefit separately (see **Table 3.2**). For example, of those entitled to a child allowance up to 16(18) years, the computed take-up probability ranged from 68 to 98% depending on the scenario. The take-up probabilities for a state social assistance ranged from 26 to 74% and for a housing subsidy – from 30 to 53%. They are defined in each relevant policy sheet at the end of the simulation. A user can change these probabilities or switch off the take-up correction for each benefit separately by modifying the relevant parameters in each policy sheet.

4.2 3.2 Aggregate Validation

4.2.1 3.2.1 Earnings and original benefits

Annex Table 5 compares the simulated aggregate earnings with estimates from the National Accounts. It shows that the total amount of *formal earnings* in the original survey database is similar (96,6%) to the corresponding total amount of formal earnings according to the National accounts⁸⁵. The match is in fact slightly worse for the earnings with the imputed ‘hidden’ part (78.5%) than for the non-updated survey data.

The total number of pensioners and the number of those in receipt of an *old-age* pension are very close to the figures provided by the National statistics agency. Yet pensioners on *disability* pensions and *state provision* pensions are overrepresented in the sample, while pensioners receiving *survivor’s* and *social* pensions are underrepresented. This may be due to the fact that respondents in the survey were asked to indicate up to three types of pensions they are entitled too, but the actual amount was attributed to the first category they had named. *Disability* and *survivor’s* pensions can be claimed together with *state provision* pensions and thus misclassified. *Social* pensions provided to the disabled children could be misclassified as *disability* pensions. Total spending on pensions in the survey is slightly higher (104.5%) than the official figure. This may be due to the fact that the amount reported in the survey includes a *social supplement to pension for non-working pensioners*. While this benefit is paid together with the state pension from the Pension Fund, in reality this is means-tested benefit which should be accounted for separately.

The number of recipients of an *unemployment benefit* in the sample amounts to 1,183 thousand people or 0.9% of the population, which is close to the relevant figures reported in official statistics (1,359 thousand people or 1% of the population). The aggregate spending on *unemployment benefit* is equal to 54.3% of the spending reported by the Public employment service. However, the latter includes expenses on material aid to the unemployed.

The spending on *scholarships* is overestimated by 27% compared to official figure, which may be due to the fact that some of the scholarships reported in the survey are covered from the private sources, rather than the State Budget.

Finally, there appears to be a problem of under-reporting of a *unified monthly payment*. According to the survey the total number of beneficiaries was 11,642 thousand households⁸⁶. This figure cannot be strictly compared to the one in official statistics, because the latter only reports the data on individual beneficiaries (16,694 thousand people). Since there may be more than one beneficiary per household, the survey estimates may still be correct. However, total spending on a *unified social payment* are underestimated by a half compared to official figures.

4.2.2 3.2.2 Simulated social contributions and personal income tax

Annex Table 6 shows comparisons of the aggregate revenue from social contributions and personal income tax in various simulation scenarios against official statistics based on administrative sources. The summary is given in **Table 3.3**. The drawback of the earnings imputation procedure is that the aggregate *social contributions* are overestimated by 33% and the *personal income tax* by 26.7%. Both SIC and income tax are predicted more precisely (110% and 99%, respectively) when the original formal earnings are used. In other words, this reflects a situation whereby a significant amount of earnings received by Russian employees

⁸⁵ The amount of formal earnings is calculated by subtracting 37% (the imputed ‘hidden’ earnings) from the total earnings including hidden.

⁸⁶ The number of household members in receipt of privileges is unknown, because the question about privileges is in the household questionnaire.

does not ‘show up’ in the firms’ accounting books and is not subject to taxation. It is not unusual for employers to pay a part of an employee’s salary in ‘an envelope’ in order to cut costs related to SIC. All in all, the formal earnings seem to be reported correctly in the survey and using additional imputation procedures does not seem to be well justified for the purposes of simulation of SIC and taxes.

4.2.3 3.2.3 Simulated social benefits

Annex Table 7 shows detailed comparisons of the number of benefit recipients, average monthly size of a benefit and the aggregate annual expenditure in various simulated scenarios with official sources. The summary is given in **Table 3.3**.

The spending on a *maternity leave allowance* is considerably underestimated (by 43%), because the proportion of eligible mothers with newly-born babies in the sample is much lower than in the general population. In some cases non-eligibility is a result of underreporting of previous earnings by mothers.

The simulated parameters for a *child care allowance up to 1.5 years* are quite similar to the ones reported by respondents themselves. However, compared to official statistics, the number of recipients is underestimated by 40%, and the aggregate spending is 78% of the amount reported by the Social Insurance Fund.

Very little external information is available regarding the performance of the program of *compensations of child care charges*, because it is funded by the regions. Comparison of the original survey data on the number of children enrolled in pre-school institutions with the administrative records shows that the figures are quite close (3% and 2.8% of the population, respectively).

The table shows four scenarios of simulating a *child allowance up to 16(18) years*. The first row (*rf_base1_2010* and *rf_base3_2010*) shows the scenario with original formal earnings and a full take-up. As far as this benefit is concerned, there is no difference between *rf_base1_2010* and *rf_base3_2010*, because the means-test takes account of the replacement income only. The second row shows the scenario with imputed hidden earnings (*rf_base2_2010* and *rf_base4_2010*) and a full take-up. The third row (*rf_base1_nt_2010* and *rf_base3_nt_2010*) shows the scenario with original formal earnings with correction for a non take-up. Respectively, the fourth row (*rf_base2_nt_2010* and *rf_base4_nt_2010*) shows the scenario with imputed hidden earnings and a non take-up correction. As far as the original data are concerned, the number of beneficiaries is almost the same as the one reported in official records (4.4% of the population compared to 4.7%). All simulation scenarios assuming full take-up seem to over-predict the number of the benefit recipients (at least by 1.2 percentage points) and the total annual spending (at least by 30%). All scenarios assuming non take-up match the number of beneficiaries with the one reported in administrative records. Among these the best match is achieved by the two scenarios based on formal earnings with a non-take up correction (*rf_base1_nt_2010* and *rf_base3_nt_2010*). In this case the predicted total expenditure amount to 108% of the figure based on administrative records, which is quite close.

Being fully left at the discretion of the Regional Governments, the program of *state social assistance* is probably the least transparent among all social protection programs. According to the available official statistics, the number of households receiving a cash monthly

allowance under this program was approximately 536,2 thousand⁸⁷ and the average size per household was 795.6 Rubles per month⁸⁸. As with the child benefit, the table shows all the scenarios of simulating the program. In contrast to the child benefit, all the policy scenarios have different outcomes because the means-test for this benefit includes all sources of household income, not just earnings. All scenarios assuming a complete take-up over-estimate the number of program beneficiaries at least by 50%. All scenarios assuming non take-up cut the number of program beneficiaries up to 1% of the population to match it with the administrative records. However, in the simulated average size is still considerably higher than the one calculated based on the administrative data⁸⁹. After all, simulating this program is most problematic, because even if the exact amounts are explicitly set in the regional legislation, the final decisions about the allocation and size of the allowance are made by the local Social protection offices.

Although administered at the regional level, the program of *housing subsidies* is regulated by the federal legislation, hence it is more transparent than the previous allowance. Again, the number of beneficiaries and total expenditure is seriously over-estimated before any take-up correction. Possibly, the source of inaccuracy is a lack of data on registration status of household members in the survey. Another argument in favour of this explanation is that the original data reports the total expenditure which is quite close to administrative records (101%). In terms of average size of the subsidy, the best performing scenario is the one based on original formal earnings and imputed 'hidden' income (*rf_base3_nt_2010*).

Table 3.3 – Model validation: simulation of taxes and benefits in various scenarios, 2010

taxes and benefits:	original data	scenarios of simulation:								External source (FSSS data)
		rf_base1_2010	rf_base1_nt_2010	rf_base2_2010	rf_base2_nt_2010	rf_base3_2010	rf_base3_nt_2010	rf_base4_2010	rf_base4_nt_2010	
Social insurance contributions*										
receptients, %	n/a	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	n/a
mean size, Rubles	n/a	3 999	3 999	4 839	4 839	3 999	3 999	4 839	4 839	n/a
expenditure, mln Rubles	n/a	2 820 000	2 820 000	3 420 000	3 420 000	2 820 000	2 820 000	3 420 000	3 420 000	2 562 974
Personal Income Tax*										

⁸⁷ The number of households was computed by dividing the number of individual recipients (1,394 thousand) by a mean household size (2.6 people).

⁸⁸ This number is computed as a product of an average size of allowance per one beneficiary (306 Rubles) and a mean household size (2.6 people).

⁸⁹ The original data gives an even higher average size, but this is due to the wording of the question: the respondents were asked to indicate any allowance received, including a lump-sum, while we are simulating only regular cash allowances.

taxes and benefits:	original data	scenarios of simulation:								External source (FSSS data)
		rf_base1_2010	rf_base1_nt_2010	rf_base2_2010	rf_base2_nt_2010	rf_base3_2010	rf_base3_nt_2010	rf_base4_2010	rf_base4_nt_2010	
receptients, %	n/a	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	n/a
mean size, Rubles	n/a	2 413	2 413	3 067	3 067	2 413	2 413	3 067	3 067	n/a
expenditure, mln Rubles	n/a	1 776 000	1 776 000	2 268 000	2 268 000	1 776 000	1 776 000	2 268 000	2 268 000	1 789 600
Maternity leave allowance*										
receptients, %	n/a	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.7
mean size, Rubles	n/a	13 676	13 676	17 655	17 655	13 676	13 676	17 655	17 655	n/a
expenditure, mln Rubles	n/a	33 000	33 000	42 600	42 600	33 000	33 000	42 600	42 600	67 317
Child care allowance up to 1.5 years*										
receptients, %	1.3	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.6
mean size, Rubles	4 086	3 599	3 599	3 959	3 959	3 599	3 599	3 959	3 959	n/a
expenditure, mln Rubles	90 720	94 800	94 800	104 280	104 280	94 800	94 800	104 280	104 280	121 797
Compensation of child care charges*										
receptients, %	3	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.0
mean size, Rubles	1 055	388	388	388	388	388	388	388	388	n/a
expenditure, mln Rubles	49 440	16 680	16 680	16 680	16 680	16 680	16 680	16 680	16 680	n/a
Child allowance up to 16(18) years*										
receptients, %	4.4	7.0	4.6	5.6	4.6	7.0	4.6	5.6	4.6	4.7
mean size, Rubles	962	583	622	598	625	583	622	598	625	n/a
expenditure, mln Rubles	70 440	66 960	46 680	54 840	47 160	66 960	46 680	54 840	47 160	43 081
State social assistance**										
receptients, %	1.0	3.7	0.9	2.9	1.0	1.9	1	1.5	1.0	1.0
mean size, Rubles	2 233	1 713	1 949	1 723	1 898	1 532	1 437	1 556	1 526	796

taxes and benefits:	original data	scenarios of simulation:								External source (FSSS data)
		rf_base1_2010	rf_base1_nt_2010	rf_base2_2010	rf_base2_nt_2010	rf_base3_2010	rf_base3_nt_2010	rf_base4_2010	rf_base4_nt_2010	
expenditure, mln Rubles	15 000	41 520	11 808	32 040	12 120	19 080	9 264	15 120	9 816	n/a
Housing subsidy**										
receptients, %	8.5	24.4	6.7	20.1	6.5	15.8	7.1	13.8	7.2	7.3
mean size, Rubles	1 018	1 040	1 058	1 003	1 046	833	822	798	785	896
expenditure, mln Rubles	56 280	165 600	46 560	132 000	47 160	85 800	38 280	71 760	36 960	55 719

Notes:

* individuals ** households ***children attending pre-school institutions and actual fees **** includes all state benefits apart from maternity, unified social payment

4.3 3.3 Income distribution and poverty

All income distribution estimates presented in **Annex Table 8** are computed for individuals according to their per capita household disposable income (equivalence scale was not used for the sake of comparability with official Russian statistics). Household income is calculated as the sum of all income sources of all household members net of personal income tax. The estimates of income inequality and poverty from RUSMOD (column 's') are given alongside those computed using the original RLMS-HSE data (column 's'). Because of the differences due to using simulated rather than recorded benefits we would expect the original data and RUSMOD results to be close but not identical. The comparison is shown using two sets of scenarios: assuming 100% take-up of means-tested benefits and using the incomplete take-up assumption. The differences between the scenarios indicate the effects of the different income concepts.

Before proceeding with the comparisons of the model output with the official statistics an explanation should be made regarding the approach applied by the National statistics agency to derive income distribution estimates. Currently the source of original data for assessing income distribution is the HBS. According to different estimates the HBS sample represents from 80 to 97% of the Russian population. The 'extreme' groups of the population – the poorest (homeless people, refugees, internally displaced people, etc.) and the richest – are not represented in the sample. To deal with this fact the National statistics agency carries out an income adjustment procedure (according to the data on retail trade turnover) using a two-parameter lognormal model. Until 1992 the method of deriving income distribution estimates was as follows: one of the parameters of this model – a root mean square deviation of logarithms – was derived from the HBS, another parameter – mean per capita income – was derived from the National Accounts (the Balance of Income and Expenditure). Starting from 1992 the National statistics agency applies another method which is impossible to identify

based on their official publications. As a result, income distribution characteristics derived from the original HBS data and the ones in the macroeconomic statistics diverge considerably. The appropriateness of using the lognormality assumption for the distribution of income in the present situation of Russia is a source of a big debate in the academic community. However, comparing RUSMOD output with the official statistics is the only way to justify our income imputation method and to check the validity of the model in terms of income distribution estimates.

Before any earnings and income adjustment, RUSMOD estimates of poverty rates are too high relative to the published official poverty statistics. However, after the adjustment of income components but before any take-up correction the poverty rates calculated by RUSMOD are too low. Arguably, the best match with the National accounts is achieved using scenario based on the formal earnings, imputed 'hidden' income and take-up correction (*rf_base3_nt_2010*). The overall poverty headcount is 12.4% compared to 12.6% from the macroeconomic statistics. The child poverty rate is 19.3% compared to 18.5%. Poverty rate of young people (16-30 years) is 14.7 against 14.4%. The comparisons for older people are less good: for adults below retirement age (30-54/59 years) 13.5% against 11.5%; for pensioners – 4.2% versus 9.8%. The estimates of poverty gap diverge a little more: 2% in RUSMOD and 1.2% in official statistics.

In a similar way to the poverty estimates, the non take-up correction improves the match of other income distribution characteristics both with the official statistics and the original data. Mean income and Gini coefficient are simulated reasonably well in all the scenarios, except for the extreme cases: the one that uses no earnings or income imputation at all (*rf_base1_2010*) and the one that imputes both 'hidden' earnings and household income components (*rf_base4_2010*). In the best performing scenario (*rf_base3_nt_2010*) the share of the top income quintile appears to be similar to the official estimate (49.1 against 47.7%). However, the estimates of the income share of the top decile still diverge (35% in the model against 30.9% in the National accounts). The latter is likely to be the result of using the lognormality assumption. At the same time, the bottom quintile has a higher income share in RUSMOD (6.3% versus 5.2%). The plausible explanations include the sample bias towards low-income households and the imprecision of non take-up correction. These two effects balance each other and the result is almost identical estimates of the Gini coefficient (0.421).

4.4 3.4 Results and 'healthy warnings'

This section summarizes the main findings in terms of particular aspects of RUSMOD that should be borne in mind when planning appropriate uses of the model and in interpreting results.

- The level of precision in replicating the exact policy rules to a large extent depends on the level of control over the program by the federal authorities. The precise simulation of *SIC* and *personal income tax* is quite straightforward due to the transparency and high level of centralization of the Russian tax system. Allowances paid from the Social Insurance Fund are simulated relatively precisely. When it comes to means-tested programs, the rules for *housing subsidies* (mainly subject to federal legislation) are simulated more precisely compared to the *child allowance up to 16(18) years* (subject to regional legislation but with the minimum standards recommended by the federal law). The *state social assistance* which is completely at discretion of the regions, has to be simulated with many simplifications.

- The original survey data seems to give reasonably good estimates of formal earnings, pensions and other social benefits. The total amounts of SIC and taxes based on the reported earnings from formal economic activities are predicted quite accurately. In contrast, household income from other sources, such as bank deposits, shares and housing lease is underreported, which (if left without correction) leads to higher poverty rates and, hence, to over-estimation of the coverage of the means-tested programs.
- The National statistical agency itself faces the problem of underreporting of income and solves it by inflating population income based on the information about the retail trade turnover. However, in the microsimulation model the imputation of ‘hidden’ income without a non take-up correction creates the situation of ‘perfect targeting’, whereby the means-tested allowances are received by the poorest households. This results in over-estimation of the income share of the bottom quintile and unreasonably low estimates of poverty.
- The best match among all the components of the model and the official statistics is achieved by the policy scenario based on unadjusted formal earnings, imputed ‘hidden’ household income and an incomplete take-up assumption applied to the means-tested benefits. The take-up probabilities are calculated separately for each of the means-tested benefits, as the ratio of the numbers of beneficiaries according to the administrative data and the model. Noteworthy, we assume a random non take-up. Yet in reality non take-up may be correlated with some household characteristics. This can be a source of discrepancy between the model and National accounts data in predicting the income share of the bottom quintile.
- Also, one must be aware of the fact that in most of social programs the requirement is that income reported for the three, six or twelve months preceding the date of application. The reference period in the original data is one month preceding the survey date. In simulations we assume that the amount of income reported is received at the same rate throughout the year. This is a possible source of two types of error: for some households annual income can be over-predicted and vice versa.
- Finally, limitations applicable to all arithmetic MSMs apply to the Russian model as well. Long-term effects of policy reforms, apart from the incentive potential of the tax-benefit system, are beyond the scope of this model.

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6. ANNEX

7. Figure 1 – Organizational structure of social protection governance at the federal level

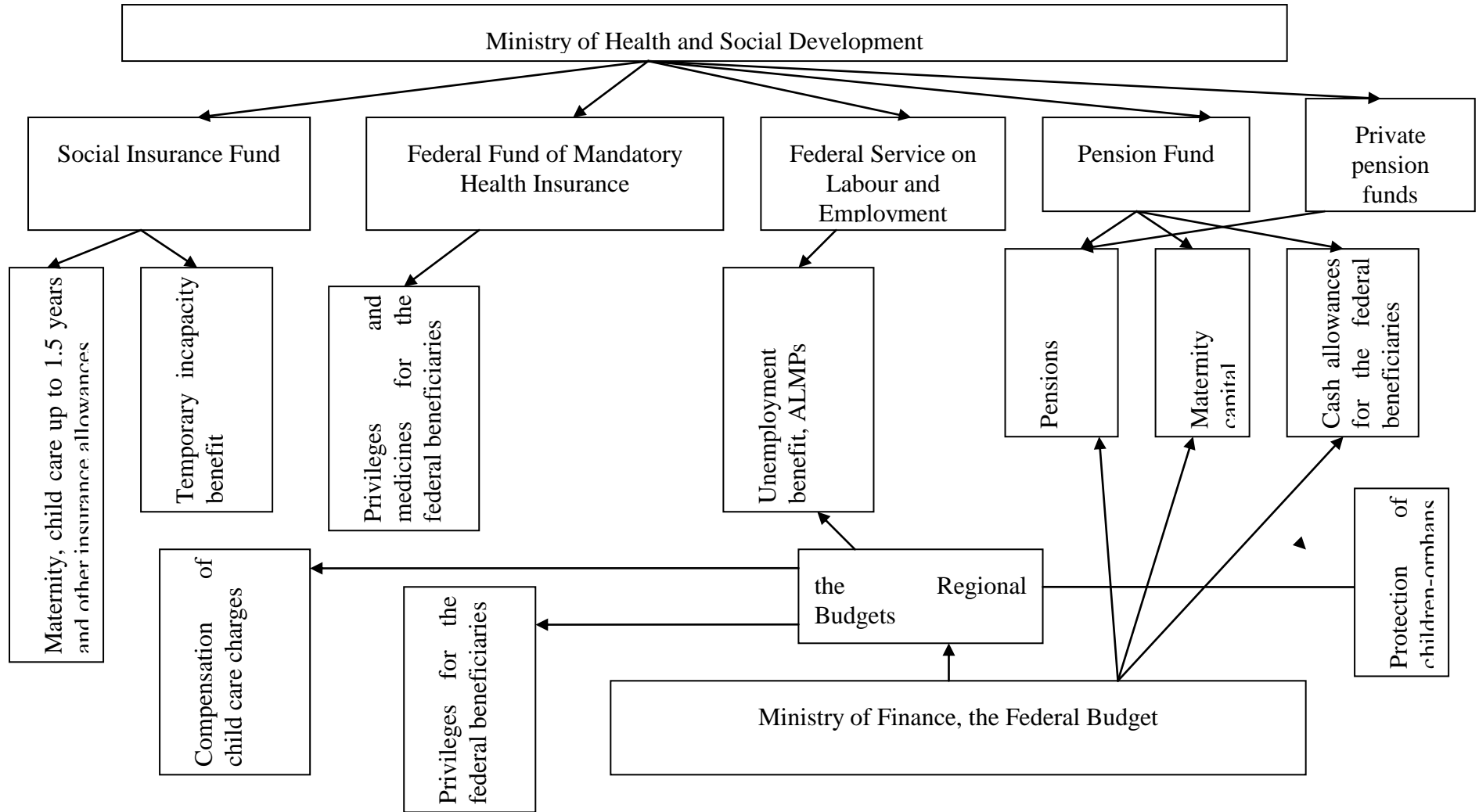


Figure 2 – Organizational structure of social protection governance at the regional level

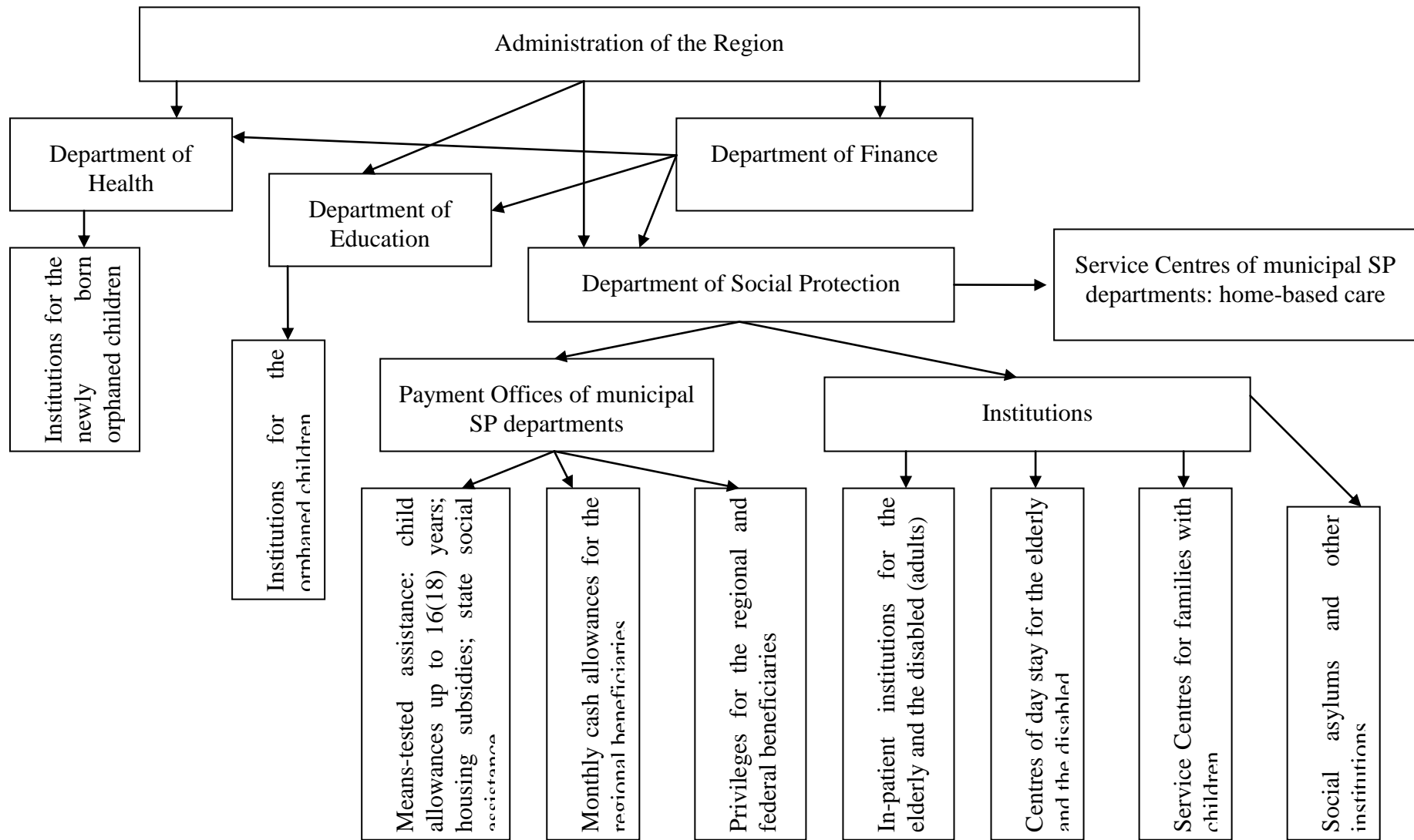


Table 1 - Coverage of the population by social protection programs**(the number of beneficiaries, thousand people/households, by the end of the year)**

<i>Year</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
Social allowances						
Pensions	38 313	38 325	38 467	38 598	39 090	39 706
old age pensions	29 192	29 363	29 788	30 153	30 828	32 462
disability pensions	4 323	4 230	4 062	3 925	3 816	2 703
survivor's pensions (to each family member incapable to work)	2 737	2 506	2 172	1 716	1 523	1 456
pensions for those who suffered from nuclear and technological catastrophes	215	226	249	272	275	273
social pensions	1 819	1 971	2 161	2 492	2 605	2 762
pensions for public service	27	29	35	40	43	49
Social supplement to pension						4 943
federal						2 494
regional						2 449
Unemployment benefit	1 570	1 522	1 305	1 253	1 873	1 359
Maternity and child care allowances						5 209
lump-sum allowance on child birth						1 579
for socially insured						1 158
for socially uninsured						421
child care allowance up to 1.5 years						3 630
for socially insured						2 033
for socially uninsured						1 596
Maternity capital, issued certificates			314	569	940	789
used the assests to pay for mortgage/housing					96	246
received a lump-sum payment of 12,000 Rubles						1 606
Compensation of charges for pre-school institutions			3 800		4 200	
Privileges	na	27 950	28 533	28 675	28 580	28 639

<i>Year</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
monthly cash payment for federal beneficiaries	16 365	16 792	16 905	16 841	16 767	16 694
incl. the disabled *	12 715	13 221	13 263	13 220	13 171	13 095
regular cash payment for regional beneficiaries**	na	11 159	11 628	11 834	11 813	11 945
State social assistance to the poor	na	1 352	2 128	1 589	2 959	2 697
monthly cash payment	na	554	563	649	1 739	1 394
lump-sum cash payment	na	799	1 565	940	1 221	1 303
Housing subsidy	6 064	5 458	4 561	4 086	4 275	3 763
<i>as % of all households</i>	<i>11.9</i>	<i>10.6</i>	<i>8.8</i>	<i>7.9</i>	<i>8.3</i>	<i>7.3</i>
Monthly allowance for children up to 16(18) years from poor families						
children-reipients	13 345	11 830	11 312	10 623	10 524	9 943
<i>as % of children under 16 years</i>	<i>55.4</i>	<i>50.7</i>	<i>49.8</i>	<i>47.2</i>	<i>46.7</i>	<i>43.5</i>
families-reipients	9 565	8 426	8 040	7 445	7 285	6 750
Social care services						
Services for children and families						
pre-school education institutions	4 530	4 713	4 906	5 105	5 228	5 388
<i>as % of children aged 1-6 years</i>	<i>57</i>	<i>58</i>	<i>59</i>	<i>59</i>	<i>58</i>	<i>58</i>
recreation and health improvement in children camps	5 667	5 286	5 136	5 040	4 864	7 700
Services for children-orphans						
institutions for orphaned children/children left without parental care	179	171	151	140	131	126
incl. boarding schools for children with limited health capacities	25	25	21	23	21	20
Services for the disabled/elderly						
in-patient care institutions	264	266	266	268	266	271
for adults	235	239	241	245	244	247
for children	29	27	25	23	22	24
out-patient centres of temporary stay	54	56	44	49	47	35
out-patient centres of day stay	881	656	682	615	652	573

<i>Year</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
home-based care	1 148	1 101	1 108	1 108	1 101	1 089
boarding schools for the children with limited health capacities	167	157	152	148	142	142
Services for homeless persons						
institutions for homeless persons (dosshouses, shelter facilities, centres for social adaptation, etc.)	94	99	101	95	88	104
<i>Pro memoria</i>						

population, thousand people	143 474	142 754	142 221	142 009	141 904	141 914
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Notes:

*including war invalids, other disabled adults and disabled children

**including labour veterans, workers on the homefront, victims of political repressions and citizens with honorary degrees/special merits before the region.

Sources:

Federal State Statistics Service (Rosstat): on-line database at <http://www.gks.ru/>

the Pension Fund on-line database: <http://www.pfrf.ru>

Table 2 - Social protection expenditure in Russia (in mln Rubles and as % of GDP)

<i>Year</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
<i>in current prices, mln Rubles</i>						
Social protection, total	2 920 626	3 527 713	4 520 611	5 690 318	6 844 030	8 501 458
Healthcare, physical culture and sports	797 056	962 187	1 381 531	1 546 254	1 653 110	1 708 805
Pensions¹⁾	1 294 816	1 484 111	1 731 618	2 328 614	2 912 022	4 059 579
Unemployment benefit and ALMPs	26 383	30 919	50 138	53 367	162 094	181 172
Unemployment benefit and material aid to unemployed ³⁾	16 452	19 530	15 733	15 954	49 124	52 810
Employment service and ALMPs	9 931	11 389	34 405	37 413	77 386	87 090
Regional anti-crisis programs ⁵⁾					35 584	41 272
Social insurance²⁾	150 631	194 300	287 303	362 442	428 961	491 154
Maternity leave allowance	14 534	19 244	29 521	44 417	57 310	67 317
Lump-sum allowance on child birth/family placement	8 479	11 376	12 624	14 549	17 185	18 737
Child care allowance up to 1.5 years	5 670	7 642	56 214	77 608	99 233	121 797
Child birth certificate		12 826	15 013	15 809	16 835	16 947
Temporary incapacity benefit	95 669	112 077	139 147	171 093	198 381	231 498
Workplace accident/work-related disease insurance covers	28 833	30 761	32 689	36 576	42 152	46 315
Social assistance (funeral grant, etc.)	16 451	14 736	16 074	17 032	20 251	16 331
Social assistance	387 301	532 395	617 902	735 202	1 005 743	1 282 660
Privileges (cash and in kind) ⁶⁾	122 552	162 363	202 780	247 802	312 101	353 151
<i>Rent and utilities</i>	<i>80 489</i>	<i>102 497</i>	<i>120 688</i>	<i>142 114</i>	<i>176 458</i>	<i>214 493</i>
<i>Transportation and other main types of privileges</i>	<i>36 751</i>	<i>54 117</i>	<i>67 412</i>	<i>98 036</i>	<i>118 262</i>	<i>130 979</i>
Monthly cash payment ⁷⁾	172 758	244 933	279 857	316 604	356 608	415 946

<i>Year</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
<i>Incl. through the regional budgets</i>	39 179	46 149	59 294	67 014	80 610	99 691
Means-tested benefits ⁸⁾	83 365	93 597	102 852	129 171	175 010	237 727
<i>Child allowance up to 16(18) years</i>	18 135	19 624	24 090	32 611	40 898	43 081
<i>Housing subsidy</i>	40 035	44 259	44 864	43 668	52 878	55 719
<i>State social assistance</i>	1 629	0	1 931	2 136	11 466	8 305
<i>Social supplement to pension</i>	23 566	27 925	31 967	50 756	69 768	130 622
Special forms of support for families with children ⁹⁾				11 673	54 884	109 903
<i>Maternity capital</i>					41 971	97 625
Other benefits and assistance ¹⁰⁾	8 626	31 503	32 413	29 952	107 140	165 934
Social care and other social programs ¹¹⁾	126 644	147 542	224 561	363 057	352 057	407 228
Child care institutions ¹²⁾	112 998	145 343	189 681	254 546	287 153	321 349
Youth policy and child health improvement ¹³⁾	24 796	30 917	37 875	46 836	42 889	49 511
<i>as % of GDP</i>						
Social protection	13.5	13.1	13.6	13.8	17.6	18.8
Healthcare, physical culture and sports	3.7	3.6	4.2	3.7	4.3	3.8
Pensions	6.0	5.5	5.2	5.6	7.5	9.0
Unemployment benefit and ALMPs	0.1	0.1	0.2	0.1	0.4	0.4
Social insurance	0.7	0.7	0.9	0.9	1.1	1.1
Maternity and child care allowances	0.1	0.2	0.3	0.4	0.5	0.5
Temporary incapacity benefit	0.4	0.4	0.4	0.4	0.5	0.5
Other	0.2	0.2	0.1	0.1	0.2	0.1
Social assistance	1.8	2.0	1.9	1.8	2.6	2.8
Monthly cash payment (monetized privileges)	0.8	0.9	0.8	0.8	0.9	0.9
Other privileges (cash and in kind)	0.6	0.6	0.6	0.6	0.8	0.8

<i>Year</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
Means-tested benefits	0.4	0.3	0.3	0.3	0.5	0.5
Other	0.0	0.1	0.1	0.1	0.4	0.6
Social care	0.6	0.5	0.7	0.9	0.9	0.9
Child care	0.6	0.7	0.7	0.7	0.9	0.8
Other	0.1	0.1	0.1	0.1	0.1	0.1
<hr/>						
GDP in current prices, billion Rubles	21 610	26 917	33 248	41 277	38 807	45 173
GDP growth	106.4	108.2	108.5	105.2	92.2	104.0
CPI end-year	110.9	109.0	111.9	113.3	108.8	108
cummulative CPI	110.9	120.9	135.3	153.3	166.7	180.1

Sources:

¹⁾ Expenditure on pension system: the sum of expenditure of the FB, the FSBs and the PF excluding expenditure on a monthly cash payment for federal beneficiaries (Treasury data on execution of the Consolidated Budget).

²⁾ Expenditure of the Social Insurance Fund, article 'Social Policy' and sub-article 'Child health improvement' (Treasury data on execution of the Consolidated Budget).

³⁾ Expenditure on unemployment benefit and material aid to the unemployed (FSSS digest 'Social situation and living standards of the population', tables 6.7-6.8)

⁴⁾ For 2005-2006 the data of the FB execution, expenditure of the Employment Service on article 0401; for 2007-2010 - subsidies to the FSBs for employment promotion

⁵⁾ For 2009 - expenditure on employment promotion programs at regional labour markets (Employment Service data), for 2010 - total expenditure according to the regional programs from the FB and FSBs, as of October 2010

⁶⁾ Expenditure on in-kind privileges or their cash equivalent: calculated as the sum of expenditure on social support measures in respect to payment for rent/utilities for all categories, other types of support within responsibilities of the FSBs, transportation for federal beneficiaries, social assistance to victims of radiation (Treasury data on execution of the Consolidated Budget of the RF; FSSS digest 'Social situation and living standards of the population', tables 6.5, 6.27-6.29-6.30).

⁷⁾ Expenditure on a monthly cash payment and other regular and lump-sum benefits for some categories of citizens. Calculated as the sum of expenditure on payments to federal and regional beneficiaries (Federal law on execution of the PF budget; Treasury data on execution of the Consolidated Budget of the RF)

⁸⁾ Expenditure on housing subsidy, monthly child allowance up to 16(18) years, state social assistance and social supplement to pension. Regarding state social assistance: for 2005-2007 estimated as 2.8% of the sum of expenditure on housing subsidy and child allowance (FSSS digest 'Social situation and living standards of the population').

⁹⁾ Expenditure on lump-sum and monthly benefits for children of the military, benefits related to family placement of children-orphans and maternity capital

¹⁰⁾ Expenditure on compensations to victims of political repressions, aid to the refugees and displaced persons and other social support.

¹¹⁾ Expenditure on social policy of the FB and the Consolidated SFBs (plus expenditure on transportation privileges in Moscow) without expenditure on pension provision, migration and youth policy, privileges, unemployment benefits and ALMPs, monthly cash

¹²⁾ Treasury data on execution of the FB and FSBs.

¹³⁾ Treasury data on execution of the FB and FSBs.

Table 3 - Distribution of revenues of the Consolidated Budget of the RF (including extra-budgetary funds)

<i>Year</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
<i>in current prices, billion Rubles</i>						
Revenues, total	8 579.6	10 625.8	13 368.3	16 003.9	13 599.7	16 031.9
tax revenues	6 257.2	7 461.0	9 806.6	11 202.5	9 459.7	11 345.1
corporate profit tax	1 332.9	1 670.6	2 172.0	2 513.2	1 264.6	1 774.6
personal income tax	707.1	930.4	1 266.6	1 666.3	1 665.8	1 790.5
social insurance contributions	1 178.1	1 441.3	1 980.8	2 113.2	2 300.5	2 477.1
Incl. unified social tax	436.5	614.2	782.5	811.9	976.0	
value added tax	1 472.3	1 511.1	2 261.7	2 132.5	2 050.3	2 498.6
excise taxes	253.7	270.6	314.4	350.0	347.2	471.5
taxes on total income	77.5	110.0	141.9	185.1	175.5	207.7
property taxes	253.1	310.9	411.2	493.4	569.7	628.2
taxes on natural resource extraction	928.6	1 187.3	1 235.1	1 742.6	1 080.9	1 440.8
arrears and overpayment on cancelled taxes	53.9	28.8	22.9	6.2	5.2	56.1
<i>as % of tax revenues</i>						
tax revenues	100	100	100	100	100	100
corporate profit tax	21	22	22	22	13	16
personal income tax	11	12	13	15	18	16
social insurance contributions	19	19	20	19	24	22
incl. unified social tax	7	8	8	7	10	
value added tax	24	20	23	19	22	22
excise taxes	4	4	3	3	4	4
taxes on total income	1	1	1	2	2	2
property taxes	4	4	4	4	6	6
taxes on natural resource extraction	15	16	13	16	11	13

<i>Year</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
arrears and overpayment on cancelled taxes	1	0	0	0	0	0
<i>as % of GDP</i>						
Revenues, total	39.7	39.5	40.2	38.6	34.8	35.7
tax revenues, total	29	27.8	29.5	27	24.2	25.2
corporate profit tax	6.2	6.2	6.5	6.1	3.2	3.9
personal income tax	3.3	3.5	3.8	4	4.3	4.0
social insurance related taxes and contributions	5.4	5.4	6	5.1	5.9	5.5
incl. unified social tax	2	2.3	2.4	2	2.5	
value added tax	6.8	5.6	6.8	5.1	5.2	5.6
excise taxes	1.2	1	1	0.9	0.9	1.0
taxes on total income	0.4	0.4	0.4	0.4	0.4	0.5
property taxes	1.2	1.2	1.2	1.2	1.5	1.4
taxes on natural resource extraction	4.3	4.4	3.7	4.2	2.8	3.2
arrears and overpayment on cancelled taxes	0.2	0.1	0.1	0	0	0.1

Source: Federal State Statistics Service (Rosstat): on-line database at <http://www.gks.ru/>

Table 4 - Simulation of taxes and benefits in RUSMOD

Taxes and benefits	Variable name	2010	Why not simulated
Employer social insurance contributions	tscer_s		

Taxes and benefits	Variable name	2010	Why not simulated
Pension Fund	tscerpi_s	S	
Social Insurance Fund	tscersi_s	S	
Federal and Territorial Funds for Mandatory Health Insurance	tscerhl_s	S	
Self-employed social insurance contributions	tscse_s		
Pension Fund	tscsepi_s	S	
Federal and Territorial Funds for Mandatory Health Insurance	tscsehl_s	S	
Personal income tax		S	
Withholding income tax	tinwh_s	S	
Standard tax deductions			
-for all categories of taxpayers	tintawhs_s	S	
-for each child under 18 years (24 years if the child is a full-time student).	tintawhc_s	S	
Final income tax	tin_s	S	
Social tax deductions		E	no information available
Property tax deductions		E	no information available
Professional tax deductions		E	no information available
Property taxes			
Land tax		E	no information available
Vehicle tax		E	no information available
Indirect personal taxes			
Value added tax		E	not simulated in the current version
Excise taxes		E	not simulated in the current version
Pensions			
Old age labour pension	poa00	I	no data on contribution history
Old age state provision pension	poa01	I	no data on contribution history
Old age social pension	poa02	I	no data on contribution history
Disability labour pension	pdi00	I	no data on contribution history

Taxes and benefits	Variable name	2010	Why not simulated
Disability state provision pension	pdi01	I	no exact data on health status and contribution history
Disability social pension	pdi02	I	no exact data on health status and contribution history
Survivors labour pension	psu00	I	no data on contribution history
Survivors social pension	psu02	I	no data on contribution history
Other pension	pot	I	no data on contribution history
Social additional payment for non-working pensioners		E	in the original data merged with pensions
Unemployment benefit		I	no data on contribution history
Maternity and child care allowances			
Maternity leave allowance	bmapr_s	PS	simulated with certain
Lump-sum allowance to women registered in medical establishments in the early stages of pregnancy (12 weeks)		E	lump-sum allowance
Lump sum allowance for a pregnant wife of the military at the compulsory military service		E	too few cases
Lump-sum allowance on child birth/placement of a child into a family		E	lump-sum allowance, hence has no effect on permanent income
Child care allowance up to 1.5 years	bmacc_s	PS	simulated with simplifications since there are no exact data on contribution history
Maternity capital		E	lump-sum allowance
Monthly allowance for children up to 16(18) years from poor families	bch_s	S	
Monthly allowance for children of the military at the compulsory military service		E	too few cases
Supply-side subsidies for child care		E	no data on the cost of services
Compensation of charges for pre-school institutions	bcc_s	S	
Monthly remuneration for a guardian/custodian		E	no data on status of children
Salary for foster parent		E	no data on status of children
Monthly payment for child support for orphaned children		E	no data on status of children
Social assistance			

Taxes and benefits	Variable name	2010	Why not simulated
Monetized privileges (monthly cash payment)		I	no data on contribution history
In-kind privileges			
Fuel subsidies		I	no data on eligibility
Discounts on rent and utilities		I	no data on eligibility
State social assistance to the poor	bsa_s	PS	often provided at discretion of regional authorities
Housing subsidy	bho_s	S	
Health care/disability			
Temporary incapacity benefit		E	no data on health status and contribution history
Workplace accident/work-related disease insurance		E	no data on health status and contribution history
Monthly compensatory payment to persons who take care of the incapable to work citizens		E	no data on health status and contribution history

Notes:

E = excluded from the model as it is neither included in the micro-data nor simulated

I = included in the micro-data but not simulated

PS = partially simulated as some of its relevant rules are not simulated

S = simulated although some minor or very specific rules may not be simulated

Table 5 – Model validation: original earnings and benefits, 2010

	RLMS-HSE 2010					External source (FSSS 2010)			
	Recepients			average size	expenditure	recipients		average size	expenditure
	N	thousand	% of sample	Rubles per month	mln Rubles	thousand	% of population	Rubles per month	mln Rubles
Net earnings									
w/t hidden earnings (rf_base1_2010, rf_base3_2010)	7 210	58 810	42.8	15 561	10 980 000	69 804	48.8	12 875	11 368 252
with hidden earnings (rf_base2_2010, rf_base4_2010)	7 210	58 810	42.8	20 112	14 160 000	69 804	48.8	20 437	18 044 844
All public pensions*	4 821	40 910	29.8	8 436	4 140 000	39 706	28.0	7 593.9	3 961 400
Labour pensions:									
old-age pensions	3 563	30 411	22.1	8 377	3 060 000	32 462	22.9	8 166	n/a
disability pensions	580	4 882	3.6	8 893	520 800	2 703	1.9	5 137	n/a
Survivors pensions	74	646	0.5	6 309	48 840	1 456	1.0	4 819	n/a
Social pensions	138	1 104	0.8	6 807	90 240	2 762	1.9	4 731	n/a
State provision pensions	409	3 401	2.5	9 477	386 400	322	0.2	8 912	n/a
Unemployment benefit*	162	1 183	0.9	2 024	28 680	1 359	1.0	n/a	52 810

Scholarships**	310	2 603	1.9	1 660	51 840	n/a	n/a	n/a	40 800
Unified monthly payment**	1 431	12 491	9.1	992	148 800	n/a	n/a	n/a	288 341
Privileges on rent and utilities**	1 536	13 499	9.8	928	150 000	n/a	n/a	n/a	n/a

Notes:

*individuals ** households

Table 6 – Model validation: social insurance contributions and personal income tax, 2010

	RLMS-HSE 2010					External source (FSSS 2010)
	Taxpayers			Mean size	Revenue	Revenue
	N	thousand people	% of sample	Rubles	mln Rubles	mln Rubles
Social insurance contributions						
original data	n/a	n/a	n/a	n/a	n/a	2 562 974
rf_base1_2010, rf_base3_2010	7210	58 810	42.8	3998.9	2 820 000	
rf_base2_2010, rf_base4_2010	7210	58 810	42.8	4839.3	3 420 000	
Pension Fund						
original data	n/a	n/a	n/a	n/a	n/a	1 929 016
rf_base1_2010, rf_base3_2010	7210	58 810	42.8	3083.1	2 172 000	
rf_base2_2010, rf_base4_2010	7210	58 810	42.8	3729.5	2 628 000	
Social Insurance Fund						
original data	n/a	n/a	n/a	n/a	n/a	316 979
rf_base1_2010, rf_base3_2010	6680	54 581	39.7	471.9	309 600	
rf_base2_2010, rf_base4_2010	6680	54 581	39.7	572.9	375 600	

Federal and Territorial Funds for Mandatory Health Insurance

original data	n/a	n/a	n/a	n/a	n/a	316 979
rf_base1_2010, rf_base3_2010	7210	58 810	42.8	477.9	337 200	
rf_base2_2010, rf_base4_2010	7210	58 810	42.8	578.1	408 000	
Personal Income Tax						
original data	n/a	n/a	n/a	n/a	n/a	1 789 600
rf_base1_2010, rf_base3_2010	7518	61 374	44.7	2412.5	1 776 000	
rf_base2_2010, rf_base4_2010	7536	61 510	44.7	3066.9	2 268 000	

Table 7 – Model validation: simulated social benefits, 2010

	RLMS-HSE 2010					External source (FSSS 2010)			
	Receptients			mean size	expenditure	receptients		mean size	expenditure
	N	thousand people	% of sample	Rubles	mln Rubles	thousand people	% of population	Rubles	mln Rubles
Maternity leave allowance*									
original data	n/a	n/a	n/a	n/a	n/a	1 038.6	0.7	n/a	67 317.0
rf_base1_2010, rf_base3_2010	25	201	0.1	13 676.3	33 000				
rf_base2_2010, rf_base4_2010	25	201	0.1	17 654.6	42 600				
Child care allowance up to 1.5 years*									
original data	243	1 851	1.3	4 086.1	90 720	3 677.8	2.6	n/a	121 797.1
rf_base1_2010, rf_base3_2010	288	2 194	1.6	3 599.1	94 800				
rf_base2_2010, rf_base4_2010	288	2 194	1.6	3 959.1	104 280				
Compensation of child care charges*									
original data***	492	3 908	2.8	1 054.6	49 440	4 200.0	3.0	n/a	n/a
all systems	450	3 576	2.6	387.7	16 680				
Child allowance up to 16(18) years*									
original data	784	6 104	4.4	961.7	70 440	6 750.0	4.7	n/a	43 081.0
rf_base1_2010, rf_base3_2010	1 226	9 569	7.0	583.3	66 960				

	RLMS-HSE 2010					External source (FSSS 2010)			
	Receptients			mean size	expenditure	receptients		mean size	expenditure
	N	thousand people	% of sample	Rubles	mln Rubles	thousand people	% of population	Rubles	mln Rubles
rf_base2_2010, rf_base4_2010	981	7 634	5.6	598.2	54 840				
rf_base1_nt_2010, rf_base3_nt_2010	798	6 264	4.6	621.8	46 680				
rf_base2_nt_2010, rf_base4_nt_2010	802	6 288	4.6	625.4	47 160				
State social assistance**									
original data****	66	559	1.0	2 233.2	15 000	536	1.0	795.6	n/a
rf_base1_2010	245	2 022	3.7	1 712.7	41 520				
rf_base2_2010	188	1 551	2.9	1 723.1	32 040				
rf_base3_2010	128	1 040	1.9	1 531.7	19 080				
rf_base4_2010	101	809	1.5	1 555.5	15 120				
rf_base1_nt_2010	62	505	0.9	1 949.2	11 808				
rf_base2_nt_2010	65	531	1.0	1 897.8	12 120				
rf_base3_nt_2010	66	537	1.0	1 436.8	9 264				
rf_base4_nt_2010	66	536	1.0	1 525.9	9 816				
Housing subsidy**									
original data	500	4 608	8.5	1 018.5	56 280	3 763.0	7.3	896	55 719.0
rf_base1_2010	1478	13 251	24.4	1 039.7	165 600				

	RLMS-HSE 2010					External source (FSSS 2010)			
	Receptients			mean size	expenditure	receptients		mean size	expenditure
	N	thousand people	% of sample	Rubles	mln Rubles	thousand people	% of population	Rubles	mln Rubles
rf_base2_2010	1204	10 952	20.1	1 003.1	132 000				
rf_base3_2010	942	8 576	15.8	833.3	85 800				
rf_base4_2010	813	7 491	13.8	797.8	71 760.0				
rf_base1_nt_2010	408	3 671	6.7	1 058.1	46 560.0				
rf_base2_nt_2010	388	3 542	6.5	1 046.2	47 160.0				
rf_base3_nt_2010	423	3 886	7.1	822.1	38 280.0				
rf_base4_nt_2010	424	3 924	7.2	785.0	36 960.0				

Notes:

* individuals ** households ***children attending pre-school institutions and actual fees **** includes all state benefits apart from maternity, unified social payment

Table 8 – Model validation: income inequality and poverty, 2010

	rf_base1_2010		rf_base1_nt_2010		rf_base2_2010		rf_base2_nt_2010		rf_base3_2010		rf_base3_nt_2010		rf_base4_2010		rf_base4_nt_2010		External source	
	(o)	(s)	(o)	(s)	(o)	(s)	(o)	(s)	(o)	(s)	(o)	(s)	(o)	(s)	(o)	(s)	HBS 2010	FSSS 2010
Mean income, Rubles	12 625	12 641	12 625	12 590	14 595	14 574	14 595	14 550	15 720	15 770	15 720	15 723	17 100	17 144	17 100	17 115	12 898	22 140
Gini coefficient	0.42 1	0.416	0.421	0.421	0.420	0.418	0.420	0.421	0.42 2	0.418	0.422	0.421	0.418	0.415	0.418	0.417		0.421
Funds ratio, times	19.2	17.9	19.2	19.2	19.4	18.6	19.4	19.5	14.9	14.3	14.9	14.7	14.9	14.3	14.9	14.6	9.3	16.5
Decile ratio (9th to 1th), times	6.0	5.6	6.0	5.6	6.1	5.9	6.1	6.1	5.1	4.9	5.1	5.0	5.2	5.1	5.2	5.1		7.4
Income distribution by quintiles:																		
1th	5.3	5.6	5.3	5.3	5.3	5.4	5.3	5.3	6.2	6.4	6.2	6.3	6.2	6.3	6.2	6.2	6.9	5.2
2nd	10.7	10.8	10.7	10.8	10.7	10.7	10.7	10.6	10.7	10.7	10.7	10.7	10.6	10.6	10.6	10.6	11.0	9.8
3rd	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	14.3	14.3	14.3	14.3	14.5	14.5	14.5	14.4	15.5	14.8
4th	21.0	20.9	21.0	21.0	21.2	21.2	21.2	21.2	19.7	19.6	19.7	19.7	20.2	20.1	20.2	20.2	23.8	22.5
5th	47.8	47.6	47.8	47.8	47.7	47.6	47.7	47.8	49.1	49.0	49.1	49.1	48.6	48.5	48.6	48.5	42.8	47.7

including 10th decile	33.4	33.2	33.4	33.4	32.8	32.7	32.8	32.8	35.1	34.9	35.1	35.0	34.2	34.1	34.2	34.1	26.0	30.9
Poor by national poverty line, % of the population, including:	23.8	22.2	23.8	23.4	18.3	17.6	18.3	18.1	12.9	11.8	12.9	12.4	10.6	9.9	10.6	10.2		12.6
children under 16 years	37.5	35.0	37.5	36.8	29.5	28.3	29.5	29.1	20.3	18.4	20.3	19.3	17.0	15.9	17.0	16.3		18.5
young people aged 16-30 years	27.7	26.5	27.7	27.5	21.5	20.6	21.5	21.1	15.0	14.3	15.0	14.7	12.3	11.9	12.3	12.2		14.4
men and women over 30 years old and below state pension age	26.3	24.4	26.3	25.7	19.5	18.8	19.5	19.3	14.1	12.8	14.1	13.5	11.3	10.5	11.3	10.8		11.5
men and women over state pension age	7.7	6.9	7.7	7.6	6.5	6.0	6.5	6.4	4.3	4.0	4.3	4.2	3.7	3.5	3.7	3.6		9.8
Poverty shortfall, % of total income of the population	6.0	5.2	6.0	5.8	4.2	3.6	4.2	4.0	2.1	1.9	2.1	2.0	1.6	1.5	1.6	1.6		1.2