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### MODE OF LIFE AND LIVING STANDARDS OF RUSSIAN POPULATION IN 1989–2009

Report



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Report is presented by National Research University Higher School of Economics and "Expert" Magazine

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The report is an attempt to summarize the results of studies performed by scientists of the NRU HSE and the "Expert" Magazine under the joint project to measure changes in welfare of Russian population in 1990–2009. In this work we also involved scientists from the Independent Institution of Social Policy (IISP) and the Institute for Urban Economics. The report includes a generalization of calculations performed by different methods and aimed at studying various aspects of the change in welfare in specified years. In particular, the change in income levels is examined as well as costs of the Russian population, physical indicators of consumption including natural indicators of non-market services consumption, the change in housing affordability is estimated, also an attempt is made to construct a certain generalizing indicator of well-being which takes into account all these factors. More detailed reports on selected aspects of the problem are presented additionally.

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#### 1. Introduction

Attempts to quantify changes in baseline parameters of the living standard in Russia since the beginning of market reforms in our country, were made repeatedly, but the problem still cannot be considered as solved. This is partly due to the emotional and ideological composition of the issue, but the main difficulty still lies in the methodological and information problems. Anyway, a consensus has not yet been reached, and the problem gradually began to get signs of insolvability. Nevertheless, new attempts to solve the problem are being made.

Another attempt to estimate the dynamics of living standards in Russia in 1990–2008 was recently undertaken by a group of researchers from "Expert" Magazine. These researchers asked for advice and support the NRU HSE, and this circumstance became the formal reason for initiation a joint project of the NRU HSE and "Expert" Magazine on research of changes in living standards in Russia since the beginning of market reforms.

The report is an attempt to summarize the results of studies performed by scientists of the NRU HSE and the "Expert" Magazine under this project. In the work we also involved scientists from the Independent Institute of Social Policy (NISP) and the Institute for Urban Economics. More detailed reports on selected aspects of the problem will be presented additionally.

The report does not claim to be the final decision for the problem, which will remain topical in our country for a long time. It is rather an attempt to generalize the results already achieved and to formulate some new approaches on its solution. We consider it our duty to note that in some cases, we resorted to very rough estimation to give a more general picture, in the hope to push colleagues for studies in targeted areas. The authors would consider their mission accomplished, if the work adds a few touches to an already existing picture described by other researchers or encourages new researchers, especially the young and not burdened by ideological and other prejudices, to participate in the discussion.

### 2. Methodology

### 2.1. The study period and statistical limitations

There are many ways to understand the time frame of radical economic and social reform period in Russia. From a statistical point of view, it would be logical to consider as the starting point of research the point of changing tendencies in major macroeconomic trends, i.e. cessation of economic growth and the onset of the planned economy collapse. Various indicators (production, investment, inflation) fix the process differently, but we can say that in 1990 we could clearly speak about changing of the trend. Therefore, it would be right to construct and analyze dynamic series since 1989 or even 1988. Where possible, we did so, but the main constraint in this case is the availability of statistical data.

There are at least three aspects of the problem related to this:

- 1) methodological incomparability of the Soviet and the new Russian statistics;
- 2) lack of reliable statistical data, especially those belonging to the beginning of 1990, due to the hyperinflation, institutional and structural transformation in the economy, etc.;
  - 3) the unavailability or loss of history statistic data.

The Russian government statistics began to actively reform around 1992, i.e. already during radical economic reforms in the country. This concerns implementation of the national accounting system instead of the Soviet macroeconomic Material Product System (MPS), beginning of observation the change in prices, introduction of classifications based on international standards, reconstruction of the primary data collection system from households. Several economic processes (e.g., inflation or unemployment) in the USSR were not simply recorded.

It is known that the statistical data related to first half of 1990, are not always reliable. In 1992, Russia actually experienced the effects of hyperinflation, index of consumer prices amounted to about 2600%. It was very difficult to collect and process statistical data in these conditions, and if we add to this the lack of work experience Russian Statisticians had with the new rates and in new for them conditions of market economy, the low quality of statistics is quite understandable.

A satisfactory system of official statistics publication wasn't formed immediately. Soviet statistics collected massive amounts of primary data, but only a small fraction of them were published, and often — in the form of relative values. Unfortunately, a lot of the statistical archives were lost in the years of the Soviet collapse and the initial construction period of Russian state. There is also no access to primary statistical data on Russia, related to the 1990's. We can say that a significant part of the very valuable historical statistics of the Soviet and transition period is irretrievably lost.

The mentioned circumstances determined the choice of research methods and the reliability of the results. In most cases we had to refuse using the construction of dynamic series, preferring the analysis of extreme points. As a rule, estimates we got are indicative, i.e., do not claim to complete coverage of the described phenomenon, giving only a general idea of its magnitude and developing trends. In addition, they cannot, of course, be totally reliable. Where it was necessary and seemed to us permissible from the point of the methodology and the quality of initial data, we resorted to interpolation and extrapolation of statistical data. Where possible, we sought to connect the results with each other, but still we failed to achieve widespread mathematical balance. Nevertheless, it appears that we were able to show certain trends and historical references, related to the change in the level and the main characteristics of the living standards in Russia for the specified period and quantitatively describe some of them.

### 2.2. Three approaches to measure economic well-being and social progress

The question of what constitutes the meaning of "living standard", occupied the minds of the leading philosophers from Aristotle; many definitions of this category are still discussed in the literature. But none of these definitions is able to act as universal; each of them represents different philosophical and practical approaches. In Stiglitz commission report The Measurement of Economic Performance and Social Progress¹ it is noted, for example, that three main con-

<sup>&</sup>lt;sup>1</sup> Stiglitz J.E., Sen A., Fitoussi J.-P. The Measurement of Economic Performance and Social Progress Revisited / / Documents de Travail de l'OFCE / Observatorie Francais des Conjonctures Economiques (OFCE), 2009. Dec. No. 2009-33.

ceptual approaches proved their worth: the first is based on the conception of subjective well-being, the second — on the conception of available capabilities, the third — on the economic concepts borrowed from the theories of welfare and equitable distribution. Each of these approaches can serve as a basis for different strategies of measuring. The concept of subjective well-being based on the philosophical tradition, which sees individuals as the best judges of the conditions for their existence. In economic theory, this approach is closely connected with the tradition of the utility theory, the point of which is that the living standard reflected solely in the subjective state of each personality. Measuring the level of subjective well-being is made essentially through various surveys. Some interesting surveys on subjective perception of the market reforms results from the point of their impact on living standards were also conducted in Russia. However, within this project, we decided not to use this approach.

The concept of available capabilities is based on an approach that the living standard is assessed through the individual's freedom to make choices between different combinations of these functional states (capabilities). An example of this approach is the Human Development index, put into practice by the United Nations Development Program (UNDP) in 1990, which is based on the concept of development as a process that extends the freedom of choice and possibilities for people. By itself, this approach seems very reasonable, but in terms of its specific use there are many uncertainties that prevent its widespread occurrence. Nevertheless, we have used this approach in our project while calculating some indicators characterizing the possibility of achieving individual goals that are composite elements in the concepts of "welfare" or "living standard". In particular, we estimated the opportunity to an "average" Russian to meet his needs in buying the set of consumer goods and services, as well as the purchasing of housing.

Finally, the third *concept is based on the economic approach* — the theory of wealth and equitable distribution. The traditional approach to measure people well-being which most economists stick to, is based on the measurement and comparison of different levels of resources available to individuals that are usually estimated in terms of accounting, or different types of income or assets in cash or goods and services (in cash or in the kind form) which they consume.

This approach formed the basis of our study. Most of the studies that we reviewed are related to the comparison between consump-

tion levels of goods market and non-market services among Russian population in cash and in the natural form.

In this case, we are fully aware of the fact that the life of majority in Russia in the late 2000's was not so much better or worse than the life in the late 1980's, it changed. Their lifestyle changed, due to economic conditions, a changed organization of society and economy, current consumer references, etc. To evaluate these changes, we paid attention to structural changes of major indicators, examined the specificity of the market economy phenomena that were not typical for pre-reform Russia (including unemployment, increase in the proportion of paid services health care and education, the housing market). We took into account the fact that not only Russia was changing, but also the rest of the world. Therefore, we set the question how the living standard of Russians modified relatively not to the living standard 20 years ago, but to the living standard in other countries. We tried to give the answer to this question on the basis of the international comparison results, based on the purchasing power parity of national currencies.

Finally, we have tried to compile the results by formulating certain conclusions. The main results of our work are in the relevant chapters of this report.

### 3. Comparison of the levels and the structure of value indicators

### 3.1. Method of real money income

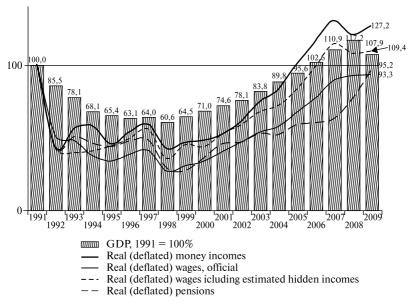
Traditionally, the Russian scientific practice as a representative indicator in studying the income rate dynamics of working population (the so-called "primary income" in the terminology of the System of National Accounts) we use an indicator of the average real wages (i.e. wages adjusted to changing of the consumer price index). To study the income dynamics of unemployed society members (the "secondary income" in SNA terminology) the real pension indicator is sufficiently representative. The aggregate income dynamic of the population (households) is traditionally described by the real income indicator of the population. All of these indicators are published regularly since Soviet times and there is no problem finding them. The dynamics of these indicators is shown below.

As a starting point for comparison the year 1991 will be used, prior to radical changes in the level of the real income<sup>2</sup>. Despite the fact that as a starting point, we chose 1991, it should be noted that inflationary processes in the Russian economy began much earlier and were expressed not in the price growth, but more in deepening shortages of goods and services, distribution of the shadow economy. However, the growth of nominal incomes was still leaving behind the rise in prices for goods and services. In 1992, the liberalization of prices for consumer goods and services<sup>3</sup> led to the sharp depreciation of income, wages and savings of the population<sup>4</sup>. The rapid increase in prices for consumer goods and services (a combined price index amounted to 2600%), outpacing an increase in nominal income (11,3 times), has led to a drop in real income in 1992 by more than 2 times — to 43,7% from the previous year level (Figure 3.1).

<sup>&</sup>lt;sup>2</sup> It should be noted that it would be better to start with an analysis of 1990 (the last "Complete" Soviet) or 1998 (the latest stable), but in this chapter it is not possible, because statistical data on several key indicators is not available.

 $<sup>^3</sup>$  The Decree of the RSFSR President from 03.12.1991 № 297 "On measures to liberalize prices"; Resolution of the Government of the RSFSR from 19.12.1991 № 55 "On measures to liberalize prices".

<sup>&</sup>lt;sup>4</sup> See also: Social Problems in the Transition Period / Social Protection for Population. Rus.-Canada. Project / ed. by N.M. Rimashevskaya. M: RIZ ISEPN, 2002. P. 29–95.



Source: L. Ovcharova's calculations on data of Rosstat.

**Figure 3.1.** Trends in GDP, real incomes, wages and pensions, 1990 = 100%

Five years after the sharp decline in the population revenues in 1992, showed an unstable and more a periodic growth. This is due to, at least, two factors specific to this period<sup>5</sup>: 1) continued macroeconomic downturn (in 1997 GDP amounted to 64% of the corresponding figure in 1991 in comparable prices), 2) non-payment crisis on wages, pensions and benefits (the debt amount on wage, pensions and other social transfers was 3,22 billion rubles in 1994 and in 1997 — already 69,4 billion rub)<sup>6</sup>.

The financial and economic crisis in August 1998 stopped the tendency of income recovery growth. The consequence of default again became a one-time jump in consumer prices, but up to 1998,

<sup>&</sup>lt;sup>5</sup> See also: Income and Social Services: the Inequality, Vulnerability, Poverty / G.E. Besstremyannaya, A.J. Burdyak, A.S. Zaborovskaya et al.; lead author L.N. Ovcharova; NISP. M.: HSE Publ. House, 2005.

<sup>&</sup>lt;sup>6</sup> Social Indicators of Income and Living Standards / Ministry of Labor and Social Development in Russian Federation. Vol. 7 (93). M., 2001.

inflation didn't have such a galloping nature, as in 1992. AS a result, real incomes in December 1998 amounted to 42,5% from the level of 1991. In general, the consequences of this crisis were not so catastrophic for the economy, as it could be expected in the summer and autumn of 1998, and already the first post-crisis 1999, accompanied by the growth of GDP (6,4%). Improving of the macroeconomic situation, debt reduction on salaries and pensions, as well as it indexation for employees in budgetary organizations led to the further growth of real incomes since 2000. The next stage of recovery income growth was fundamentally different from the first (1993–1997), as it occurred against the background of stable economic growth. Nevertheless, in real terms the income level of 1991 was only reached in 2005.

### 3.2. Method based on System of National Accounts (SNA)

It is important, however, to clearly understand that the above indicators are not indices of national accounts i.e. they do not quite match the realities of market economy. For example, the rate of real incomes does not take into account any type of income, except legal incomes in ruble terms, i.e. does not include income in kind, foreign currency, hidden or illegal incomes. Perhaps, today the share of such income has decreased, but in 1990 it was high, and ignoring it when constructing a dynamic range would be wrong.

In the SNA for analysis household income two value indicators are used more often: household disposable income and adjusted household disposable income. These indicators include all that is not included in the traditional index vied above, i.e. real disposable income (income in kind, income from own non-formal production, payments in currency, adjustment on hidden income as well as all kinds of current social transfers — pensions, scholarships, benefits, etc.). Adjusted disposable income index differs from "simple" disposable income on the amount of so-called social transfers in kind, i.e. non-market services in health care, education, social welfare, which are financed from the state budget or the budgets of nonprofit organizations and are sent to households for free use. The problem lies in the fact that it is not used in the SNA to deflating (i.e. revaluated into comparable price) incomes, because it is not clear on what

goals, in what proportion, and when they will be used. That's why it's difficult to find the correct deflator for them.

Typically, in the SNA txpenditures should be deflated. Since SNA is a balance type model, incomes are numerically balanced with the expenditures. This means that disposal income matches expenditures on final consumption, fixed capital formation (mainly housing), as well as cash savings. In the case of adjusted disposable income, consumption of free non-market services is added to households' expenditures on final consumption. This is called the actual final consumption. In our case, it would be logical to use for the analysis of the consumption level of households the dynamics of these two indicators — the household expenditures on final consumption and actual final consumption of households.

Both of these indices are calculated and published by Russian Statistical Service both in current and constant prices. So there are no problems in obtaining current data. However, certain problems arise when forming of a long dynamic range for the entire period of years 1989–2009. Official data on SNA has been published by Russian Statistical Service since 1991 in current prices and from 1992 in constant prices. Before that, Russian statistics used a different macroeconomic system and other indicators. Thus, until 1991 official data on SNA in Russia did not exist.

Fortunately, in 1998–2000 calculations were made on indicators of the SNA in Russia under the project on the historic statistics, organized by the Government of Japan. During Japanese project on the historical statistics time series of the SNA key indicators on Russia were reconstructed since 1961. Its findings were published in Japan and Russia<sup>7</sup>. With these sources time series of households' expenditures on final consumption and actual final consumption in constant prices, as well as GDP from 1988 to 2009 were formed. Based on these time series base indexes were calculated, which are listed in Table 3.1. The basis chained indexes were compiled by multiplication of related chain indexes. The same table shows the time series of indexes for the same indicators, but calculated per capita. The dynamics of household expenditures and actual final consumption that characterize the living standard of the population in Russia, according to the method of SNA, is shown in Figure 3.2.

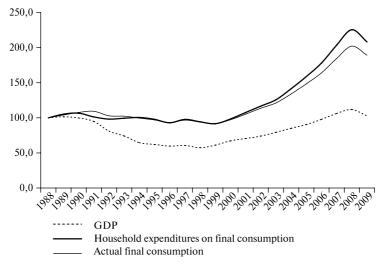
<sup>&</sup>lt;sup>7</sup> See: Russian Economic Statistics in Historical Perspectives. Tokyo: An International Workshop, 2000; *Ponomarenko A.N.* Retrospective National Accounts of Russia. 1961–1990. Moscow: Finance and Statistics, 2002.

**Table 3.1.** The dynamics of major macroeconomic indicators of household consumption Russia (1988 = 100), %

	Indexes for the main SNA aggregates			Indexes for SNA aggregates per capita			
	GDP	Household expenditure on final consumption	Household actual final consumption	GDP	Household expenditure on final consumption	Actual final consumption of households	
1988	100,0	100	100	100,0	100,0	100,0	
1989	101,5	105,3	104,1	100,8	104,6	103,4	
1990	99,8	106,6	107,6	98,9	105,6	106,7	
1991	94,8	101,2	109,3	93,8	100,1	108,1	
1992	81,0	98,2	102,8	80,1	97,0	101,6	
1993	74,0	99,4	102,4	73,2	98,2	101,2	
1994	64,5	100,5	99,5	63,9	99,6	98,6	
1995	62,0	97,8	96,9	61,4	96,9	96,0	
1996	59,8	93,0	93,1	59,3	92,3	92,4	
1997	60,6	97,7	96,7	60,4	97,3	96,3	
1998	57,4	94,3	94,1	57,3	94,2	94,0	
1999	61,1	91,6	91,8	61,2	91,7	92,0	
2000	67,2	98,3	97,2	67,6	99,0	97,9	
2001	70,6	107,6	105,2	70,9	108,1	105,7	
2002	73,9	116,8	113,6	74,6	117,8	114,6	
2003	79,3	125,8	121,3	80,4	127,5	122,9	
2004	85,0	141,5	134,0	86,6	144,2	136,6	
2005	90,4	158,7	148,4	92,6	162,6	152,0	
2006	97,9	178,1	164,1	100,7	183,3	168,9	
2007	106,2	203,6	184,6	109,7	210,3	190,7	
2008	111,7	225,6	202,2	115,6	233,4	209,2	
2009	102,9	208,2	189,2	106,5	215,6	195,9	

Sources: Rosstat; Russian Economic Statistics in Historical Perspectives...; author's calculations.

The result may seem unexpected. It is considered that the decline in living standards was much more significant, since only in 1992 income decreased more than twice from the level of 1991. But indicators of SNA do not confirm this. The drop in final consumption expenditures, of course, took place, but was not so dramatic. The reason as we already noted, is that the rate of real monetary incomes of the population does not include income in kind, hidden income, own produced goods and services, but all these specific incomes are included within the SNA indicators. Due to this, expenditures on final consumption of Russian households (by SNA) were fairly stable in 1990-s and quickly grew in the 2000-s. Its lowest level household expenditure on final consumption reached in 1999 (91% of 1988 level). Then they started to grow by 7-14% annually and by 2008 reached 225% of 1988 level. We remind that we are talking about expenditures at constant prices, i.e. the influence of the inflation factor is excluded here.



Sources: Rosstat; Russian Economic Statistics in Historical Perspectives...; author's calculations.

**Figure 3.2.** Trends in GDP, real incomes, wages and pensions, 1990 = 100%

Actual final consumption also showed impressive dynamics. Its growth was slower, since this index was constructed taking into account state spending on non-market individual services (i.e. health, education, social security) but they did not grow as fast as public ex-

penses on the purchase of goods and services. Nevertheless, in 2007 the level of actual final consumption amounted to more than 200% from 1988 level.

The corresponding figures for expenditures on final consumption per capita grew even faster, as the population of Russia after 1994 is reducing. However influence of this factor is not serious. Thus, we performed two variants of calculations the indicators for the overall welfare of Russia's population. The first option is based on traditional for this kind of data analysis of real cash income that do not take into account a number of income, including income in kind, consumption of own production and hidden income. The second version of the calculation was made using SNA indicators — households' final consumption expenditure and actual final consumption. Both variants of calculation show that the welfare of Russia's population declined in 1990 and restored in the early 2000's. By the end of the vied period the level of consumption was higher than the original. In the first case, the excess was about 30%, in the second the rate of 2009 exceeded the same indicator in 1988 more than twice.

It would be logical to assume that the difference is due to namely the inclusion of additional components in the SNA indicators. But the problem is deeper. We have already mentioned, that any statistics of the early 1990's, particularly price statistics is not entirely reliable, due mainly to sharp fluctuations in prices and the need to build chain price indices to take into account for the dynamics within 20 years. In both methods we have described a chain deflation was used. Therefore, unfortunately, we cannot be fully confident in the obtained results. Naturally, the figures obtained by the second method, which show a negligible decline in living standards in 1990 and then doubling of the figures in 2009 compared with 1989, are seriously doubtful. Nevertheless, they are calculated with meeting all the formal requirements of statistical science, and we deem it is necessary to bring them into the report, warning of distortions due to the methods used.

But even if we accept that certain inaccuracies in the calculation related to the low reliability of the initial information, took place, nevertheless it seems probable that by the end of 2000's the level of income / expenditure of Russian population slightly exceeded the level of the late 1980's — the early 1990's. The boundaries of this excess can be conventionally defined from 30 to 100%. To define more precisely this correlation, we will try to use other methods, based on a comparison of extreme points, i.e. we will refuse to construct dy-

namic series. Thus, perhaps, we can level the poor quality of statistics at the beginning of 1990-s including errors accumulated with the deflation of the chain price index for long periods at very sharp fluctuations in prices.

#### 3.3. The structure of GDP

Changes in the structure of GDP indirectly confirm the conclusion that households' final consumption expenditures declined in 1990's slower than GDP as a whole. Table 3.2 presents data on changes in the structure of Russia's GDP within 20 years. Data on the structure of Russia's GDP in 1989 is taken from the published results of Japanese project on historic statistics<sup>8</sup>.

**Table 3.2.** Changes in the structure of Russian GDP (%)

	1989	2009
GDP	100	100
Final consumption expenditure	67	74
Including — household expenditure	45	53
<ul> <li>state and non-profit organizations</li> </ul>	23	21
Gross savings	31	19
Net export	2	7

Sources: Rosstat.

As you can see, the share of final consumption expenditure in GDP has really grown — from 67% in 1989 to 74% in 2009. For comparison: the share of net exports also rose — from 2 to 7%, and this was at a tremendous increase in energy prices for energy sources<sup>9</sup> that form the basis of our exports and huge volumes of export supplies. At the same time increasing share of final consumption in GDP was only due to households' expenditures, since the proportion in GDP of public expenditures and non-profit organizations even fell.

<sup>&</sup>lt;sup>8</sup> See: Russian Economic Statistics in Historical Perspectives...; *Ponomarenko A.N.* Op. cit.

<sup>&</sup>lt;sup>9</sup> Structure of the GDP is calculated on the basis of indicators in current prices.

This is natural, at least for a period of transformative crisis (1992–1998), when both the state and people primarily tried to keep the current level of consumption. Then it turned out that during the recovery growth (1999–2008) share of expenditures on final consumption in household budgets didn't return to pre-reform indicators. Changes are impressive, the proportion of final consumption expenditure of households in GDP rose on 8 percentage points (p.p.). This is not only a compensation to maintain current consumption, but in a much greater sense to change lifestyle: less investment with tendency to improve its efficiency, expansion of the purchased consumer goods range, the disappearance of trade deficit. But also certain distrust to the state, resulting in an excessive decline in the share of long-term investment or in a lack of supply attractive and accessible for the mass consumer products, such as housing or medical services.

#### 3.4. Structure of household income

Dynamics of income as a whole still does not explain all the positive and negative changes in average income security. The described trends mask highly controversial changes in the role and importance of certain income components in the overall structure.

In recent years of the Soviet period, the income structure of the population largely corresponded to the standards of countries, that passed the step of the modernization industrial development, in which the income of employees is a major source (80%) of families' receipts. A fundamental difference was the absence of entrepreneurial revenues and income from property, share of which in the total amount of income in the first years of the Russian market economy rose to 20%. Public access to a such source of revenue became a primarily positive effect of market reforms and ensured despite more than two-fold decrease in real incomes, loyalty of the population to the reforms.

Entrepreneurial activity reached its maximum at the beginning of market reforms, when the income from this type of activity amounted to 16% of total income. These sources of income contributed to the fact that in the early years during the economic boom growth rates of revenues outpaced wage growth. If in 1999 the new market types of income (entrepreneurial income and income from the property) accounted for almost 1/5 of total income, in 2007 their share dropped to 19%. At the stage of economic growth in 2000's there was a trend of decreasing in their share, growing against the

backdrop of increasing importance of property income. This is a reaction to increased direct government intervention in the operative management of the economy. In 2008 a significant drop in the share income from the property was recorded due to the economic crisis. As a result, the current total share of income from property and entrepreneurial activity is approximately 16–17% of total income.

### 3.5. The method, based on middle-income purchasing power ("Expert")

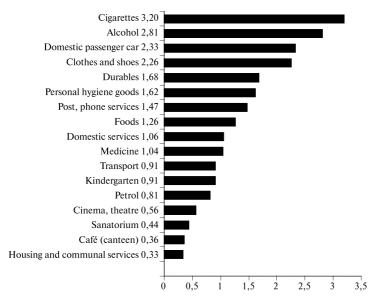
Even more clearly the conclusion is supported by results obtained by researchers of the "Expert". They used a method similar to that used when conducting international comparisons based on purchasing power parities. We remind that under this approach purchasing power of currency is estimated by the number of products and services that can be purchased at current price level and with a certain cost structure (the costs in Russia in 1990 and 2008).

For comparison, the last full Soviet year is selected — 1990. This year is quite difficult to compare, as characterized by high social instability, accompanied by a deficit on the consumer market. In this regard, it would be better to choose pre-reform 1985 or the last stable 1988. However, according to the researchers, the statistical data for these years is not very different: in 1990 wages were already significantly higher than 5 years earlier, but inflation was reflected in official statistics. It can be assumed that the use as a basis for comparing the year 1990 with its higher wages, rather than the earlier years, gave a small (but absolutely not essential) advantage to the Soviet period.

Information on prices were collected from data of State Statistical Committee in the USSR and of the Federal State Statistical Service, totally 133 positions including goods and services, grouped into major functional positions. Initially, the price index was calculated for each commodity. Then the indices were aggregated by groups of goods and services. Index on changes in purchasing power of average monthly income was received by the aggregation of group indices with the use of these groups' share in total consumption. For the weighting so-called Fisher index was used, i.e. average of the two, one of which is designed by the consumption structure in 1990, and the other — in 2008. Precisely such an approach is used when making calculations in international comparison program based on purchasing power parities.

The calculation, carried out this way, shows the growth of the purchasing power of average monthly income in 2008 to 45% of the level in 1990. In other words, the result is slightly below the midpoint of the interval obtained by using the methods described above, based on recovered time series of macroeconomic income and expenses indicators. It looks realistic and well accords with the above results, as the chosen by the "Expert"s researchers value of average income does not include those adjustments (income in kind, hidden income, etc.) that are usually included in the value of relevant indicators in the SNA methodology.

In addition to the general conclusion of nearly 50% growth of real-average income per capita other very interesting results were also achieved. Figure 3.3 shows the data of changes in the purchasing power of middle-income according to commodity groups. The great variation of the purchasing power index is seen — from 3,2 for cigarettes to 0,33 for housing utilities. This means that the magnitude of changes in relative prices reaches 9,7 times. We note again that under such structural changes the evaluation of any index will be in a certain degree conditional.



Sources: "Expert"'s researchers value on data of Goscomstat USSR and Rosstat.

**Figure 3.3.** Indices of income changes in purchasing power per capita for the period 1990–2008 by type of consumer goods and services

From Figure 3.3 it is understandable due to what the purchasing power of the average Russian citizen increased. Leadership, even with some margin, of cigarettes, alcohol and cars makes to mention an adolescence character, according to the expression of the "Expert" researchers, of the Russian economy — drinking, smoking and chasing a car (domestic) became significantly cheaper. Vodka in general is one of the leaders of the relative cheapening: now on the average monthly income 171 half-liter bottle of vodka can be bought while in 1990 — only 33 bottles (a change in 5,2 times). More relative cheapening is only demonstrated in synthetic carpets and half-woolen carpets.

Groups of products "Clothes and shoes" and "Durables" make a significant contribution to the increase in purchasing power. Apparently, the main factors of price reduction here are the openness of economic borders to imports of durable goods and a huge increase in the national currency rate compared with 1990.

Food does not give a positive contribution to growth in purchasing power of the population. Although on present income you can buy a 1.26 times more food than in 1990, this index is lower growth index of the income purchasing power (1,45) which means the relative rise in price for food.

Services rose strongly, particularly those related to the active way of life — cinema, theater, cafe, recreation, public transport. Finally, the most significant is the rise in price for housing and communal services. Housing and communal services (a set of the six basic services) are 3 times less accessible. We remind that these services are highly subsidized in Soviet times, so the growth in costs on it is inevitable; moreover, it was largely due to an increase in actual consumption of these services. (More detailed issues related to the consumption of housing services are set in section 5.3.)

The structure itself of households' consumer expenditures changed. The share of costs on the purchase of products for homemade food (without alcohol) fell slightly — from 31,5% in 1990 to 29,1% in 2008, while in 1990 this indicator came up to 52% (1999). The share of expenditure on non-food goods decreased more significantly (from 45,8 to 40,9%), which is not surprising, considering the growth of access pricing of most consumer goods. Most paradigm shift — increase in the proportion of expenditure on services: in 1990 it accounted for only 13,1% of consumer spending, in 2008 - 25,5%. The most strong increase was in the share of spending on basic services related to families' life support: for housing and communal ser-

vices — from 3,1% in 1990 to 7,7% in 2008. The share of expenditure for public transport services has grown less significantly from 2,6 to 3,1%, probably due to reduced consumption of the optional part of such services. Prices for municipal transport rise at times.

Method for estimating the purchasing power of the average income has a number of significant advantages over the others:

- 1) this method uses an approach based on access consumption, i.e. it is investigated how many goods and services you can buy at a certain average wage. Such approach is theoretically welcome (see the mentioned above Stiglitz Commission report) and is widely used, in statistical studies aimed at understanding living standards;
- 2) chain price indexes are not used here, which were extremely unreliable, at least in the early 1990's, and time series are not aligned. Extreme points are only used. This increases the reliability of results;
- 3) the method is not macroeconomic. That is, the results do not pretend to be balanced and to compare derived indicators with other indicators. However, the actual results do not contradict other studies:
  - 4) the index of "Expert" is intuitively understandable.

Of course, this index, like any other, has disadvantages. You cannot expect from it more than it can give. With the help of this indicator the overall trends can be assessed, but not more. It would be wrong to do macroeconomic conclusions based on it, because it does not take a lot into account — the changes in social structure of society and consumption structure, deficit extinction, non-market services, subsistence consumption. He does not take into account the probability that the portion of the income can be spent on accumulation. For a more thorough evaluation it is necessary to look for other indicators.

Nevertheless, let it better be an indicator, which by definition takes into account not everything, but is realistic.

# 3.6. Subtotal: the assessment of changes in the current household consumption level in Russia over the past 20 years

The above results show the assessment of changes in living standards of Russian households over the past 20 years, performed by three different methods. Table 3.3 they combined.

**Table 3.3.** Changes in household living standards in Russia in 1989–2009

Methods	Growth, % to the source	The average annual growth in the period
The method of real money income	127,2	7,06
The method of national accounts	209,2	10,46
Method for estimating the purchasing power of middle-income	145,0	8,05

Source: Authors' calculations.

These figures relate to the current consumption. Correspondingly, the estimate of the housing services consumption is presented here only in the amount of housing and communal payments. Each method has its own errors. In their view, we consider it possible to accept that for years 1989–2009 the current consumption level in Russia increased by approximately 45–50%, it is close to a third method assessment. Thus, the result quality indicates that the average level of life during this period did not only decrease in comparison with the Soviet period, as many believe, but increased in almost 1,5 times. Decrease was observed from 1990 to 1999 and in following 10 years it was compensated with an excess. At the same time GDP in 2009 compared with 1991 was approximately 108%. Difference in favor of the living standard is mainly appeared due to the reduction in the share of accumulation and the abnormal growth in prices of exported hydrocarbons. In general, one must have in mind that during 1990's Russia experienced a heavy transformational crisis, but as a result the economic moved from a plan to a market, there was a market structure economy. It and Russian business, which used its possibilities, provided the recovery growth and increasing level of wealth in indicated sizes. We can state that the market economy, thus, with all its defects, paid off, proved its viability. To a lesser extent, this can be recorded at the expense of economic policy.

## 4. Comparison of natural welfare and lifestyle indicators

### 4.1. Features of natural indicators analysis

Natural indicators differ from the cost indicators by the fact that they cannot be directly aggregated. It is possible, of course, to express the food into calories and then summarize, but even the calories cannot be added up with televisions and the number of beds in hospitals. That's why it is useless to hope to obtain by an analysis of natural indicators a response to a question, whether the welfare level increased or not. However, you can try to figure out what changed, in what direction and how much.

The Soviet people, strictly speaking, didn't live in poverty. In the USSR there was no famine, the population has been provided by non-market services of health care and education of not very poor quality, practically free housing. In addition to addition, in the USSR there was no unemployment. But there was a deficit on practically all consumer goods, their poor quality, due to lack of competition, low levels of goods provision, which according to Soviet standards can be conventionally called excesses — cars, etc. Housing was timeless problem, which spoiled more than one generation of Soviet people. The aim of our study is to try to figure out how this situation changed at the level of macroeconomic calculations, and at the level of changes in simple and understandable to everyone physical indicators

### 4.2. Foods

It would be wrong to talk about the lack of food, mass starvation or hunger in relation to Russia. This was not so neither in 1989 nor in 2008. It wasn't really about hunger even in the early 1990's, when all indicators of welfare plummeted. Russians started to produce more fruits and vegetables for own consumption within informal economic activities, but there was no mass problem with the actual food consumption.

It would be more correct to talk about the unbalanced diet. Nutrition of the Russians was not balanced, neither on the eve of reformation, nor in late 2000-s. The consumption structure of some food products improved: for example, consumption of meat and fruit increased, and consumption of potatoes, bread and sugar, in contrast,

decreased. In other areas of the consumption structure became less balanced, so that consumption of fish decreased (Table 4.1).

 Table 4.1.
 Average annual consumption of basic foodstuffs, kg

Main foods	Russia		U.S.	
	1989	2009	1989	2004
Meat and meat products in terms of meat (excluding offal and fat)	69	73,5	113	120
Milk and milk products (including animal oil) in terms of milk	396	256,2	263	266
Eggs, pieces	309	211	229	256
Fish and fish products in the product weight	21,3	20,3	12,2	11
Sugar	45,2	31,4	28	28
Grain products (bread and pasta in terms of flour, flour, cereals, legumes)	115	99,3	100	90
Potatoes	106	67,1	57	64
Fruits and berries	35	63,9	95	121

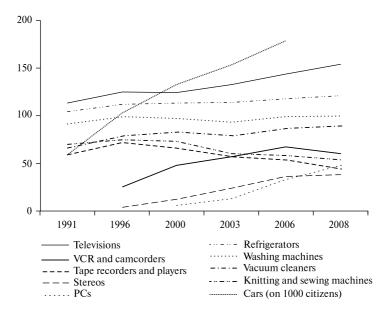
Source: Data of Rosstat.

In general, the composition of food consumed at the present time seems to be more healthy than before the reforms. You can probably also talk about the quality growth of consumed products and a greater availability without deficit.

### 4.3. Durables

The graph below (Figure 4.1) shows the dynamics of the Russian population provision with the most important types of durables.

Availability of consumer durables is now higher than before the reforms. There is only a decrease in provision with knitting and sewing machines, and tape recorders that can be easily explained by changes in consumer preferences of buyers. We can say that in providing the majority of the population with durable goods (except cars and computer) Russia is close to saturation level, and it may further mainly increase the quality properties of these products. However, now we can confidently say that the quality of durable goods, that are



Source: Data of Rosstat.

**Figure 4.1.** Changes in provision of the population with durable goods (100 households)

in the use of Russian families are much closer to the quality of products in countries with high levels of welfare than in the late 1980's.

It is interesting to note that sales of durable goods reached the level of 1990 only in 2000–2003. Meanwhile, the year 1990 people perceived as a year of deficit, and 2000 — a year of plenty. This is due to the appearance of market economy and the price equilibrium, limiting demand and increasing supply of goods and brands on the market, the advent of world-class quality technology. The same amount of goods as in 1990 was sold, but there was no need to look for them in the store — on the contrary, consumer choice became complicated.

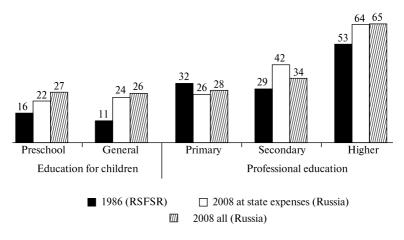
#### 5. Investments and Services

### 5.1. Consumption of education services

The introduction of this chapter on non-market goods and services, not forming a part of market final consumption, is motivated by the fact that without them comparing welfare levels in fundamentally differing socio-economic systems seems incomplete, and data for final consumption — insufficient and may overstate the results of market economy. The fact is that, according to general belief, to reform housing was free (except for narrow sector of housing cooperatives and individual houses in villages and small towns for the most part); services of education and health care were also free of charge, at least formally. Any private spending in these sectors still was not taken into account. Belief in the gratuity before the reforms of housing and such services is explained as a factor in reducing living standard in market economy.

It is extremely difficult to build a competent comparison of the housing provision, the level of educational and medical services for so many different conditions, nobody has ever done it. Nevertheless, the authors of this report dared to start solving this problem in hope that other researchers take up this risky undertaking.

Over the past 20 years, mainly under the influence of demographic processes, the number of children attending kindergartens and schools has been reduced. Along with this we observed reduction in coverage of preschool education for children. Under the influence of changing preferences of the population and institutional transformations in the system of professional education, the coverage of young people with primary professional education substantially declined, coverage of higher education increased. Specific weight of number of university students in the total number of those who was getting professional education increased, mainly at the expense of paid higher education. But the danger consisted in the fact that payment stimulated the growth of students and the declining of education quality. It must be adding that the crisis in the industry reduced the demand for technical professions. the necessary structural changes led to considerable losses. This makes it difficult to compare levels of education now and 20 years ago. Over the past 20 years, the Russians began to spend more for education at all levels (Figure 5.1). The most significant was growth in funds accounted per one student, aimed at schools and universities.



Sources: Authors' calculations on data of Rosstat and other statistics.

**Figure 5.1.** The relative costs on one student (to the average annual wage in the economy), %

To ensure comparability of data on the cost of education in the late 1980's and in late 2000's the cost per one student were considered according to the annual average wages in the economy (further — the relative costs). At all levels of education, except for primary professional education, a growth in the relative costs per student is observed. Relative costs on raising children in the kindergarten from the budget funds increased from 16 to 22%, and in view of population funds up to 27%. Increase in the relative costs on education at school was over 110% and by the end of 2000-s established at 24%, if consider only public funds, and 26%, if consider the resources of the population. In the system of initial professional education on the relative budget costs per student decreased from 32 to 26%, and aggregate relative costs in the late 2000's amounted to 28%. Increase in relative budget costs one budget student in secondary professional and higher education increased from 29 and 53% at 13 and 11 percentage points respectively. In secondary vocational education overall relative costs per student were on 9 p.p. lower than budgetary cost per budget student. This is because the average price for paid education on programs of secondary vocational education in the late 2000's was below budget expenditures per budget student for the relevant programs. In higher education, differences in overall relative costs per student and budget cost per budget student is not observed — average cost of tuition at universities on a place with full cost recovery is comparable with the average budget costs per one budget student.

There is unfortunately no technique for direct comparison of the quality of teaching in the school over the past 20 years. However, international tests of basic skills knowledge evidence about the growth of results in the primary school and its decline — in the secondary. The rise in popularity of higher education has led to significant increase in the proportion of workers with higher education in general employment. One reason of the higher education popularity is a high premium for education, i.e. income growth as a result of studying in universities. Over 20 years a premium for higher education increased almost 3 times. Meanwhile returns from education that takes into account the costs on preparing for entrance and on learning in higher education has increased in late 1980 — early 1990's about 2 times and till now changed slightly.

Marked changes tell a lot. On the one hand, families are forced every year to spend more on education, and this is perceived as a disadvantage in comparison with the end of 1980. But it also means that families are ready to spend money on education and have the opportunity to do it that is in our opinion a very positive sign. Firstly, we can see a shift in the minds of more and more Russians toward an understanding that the better education means the possibility of a better life in the future, i.e. spending on children's education are treated as investments. Secondly, the opportunity to spend significant funds on education points the overall growth of well-being, because the costs on education are not considered as priority expenses, such as, for example, spending on food. But yet the referred danger forces to wary for quantitative attributes of success. Still the existing material does not give a base for too optimistic estimates. In the best case we can say that in this segment the welfare of the population of Russia didn't worsen.

### 5.2. Consumption of health care services

A significant positive shift in the last two decades was the emergence of new opportunities for treating diseases. New medical technologies gain popularity, most of which are based on imported medical equipment. The useless search for the necessary medicines went to the past, now you can buy them in pharmacies. New methods of diagnosis and treatment improved the potential of medicine to combat the most

"lethal" diseases. What was formerly the property of only the top of the society, served in private medical institutions, became physically available for much of the population, at least for city dwellers.

Increased chance of survival in the presence of serious diseases is undoubtedly the result of a policy of open boundaries, and the involvement of the Russian health care in the world medical and technological processes. Without these fundamental changes our backlog from the world development would be even more significant.

At the same time, the financial condition of obtaining medical care deteriorated markedly as a result of poor finance of the industry. Government spending (the budget and compulsory health insurance) in constant prices stably declined and only in 2006 reached the level of 1994 (Figure 5.2). In recent years the state made some serious investments in health care, but in relation to GDP, these expenditures remain virtually unchanged (Figure 5.3) and they substantially inferior to expenditure of Western European countries (3,2% in 2009 compared with 6–9% in most EU countries).

Reduction in state funding occurred against the backdrop of increasing needs in the medical assistance of the population. For 1990—2008 total incidence per 100 thousands of the population grew by 45%, primary disease grew on 19%. Particularly rapid was the growth in incidence of cancer (85%) and cardiovascular (2,3 times) diseases, require particularly significant medical expenses. Needs in additional financial resources also exceeded due to aging of the population.

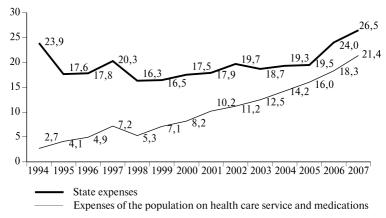
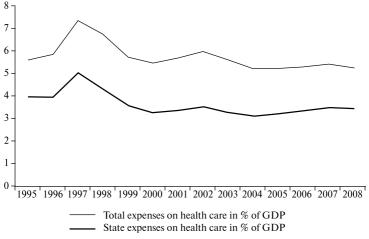


Figure 5.2. Public and private spending on health in 1994 prices, bln rub.

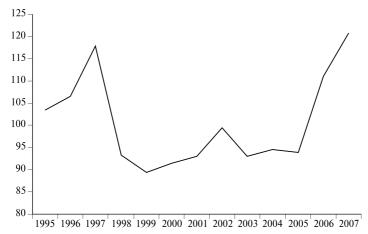
Source: Authors' calculations on data of Rosstat.



Source: Data of the World Health Organization.

Figure 5.3. Spending on health care in ratio to GDP

Multidirectional dynamics of the population's needs and state funding for health care led to the fact that disposable public resources per a case of diseases within 1994–2005 years decreased by 10% and only in later years began to grow (Figure 5.4).

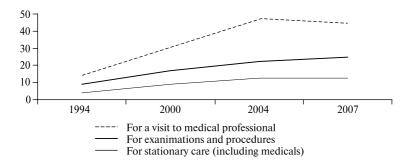


Source: Author's calculations on data of Rosstat. Morbidity is characterized by a number of cases detected (or taken under medical supervision) for a year at the health facility.

Figure 5.4. Dynamics of public health financing per registered patient

Lack of state funds was compensated by the increase in private spending. Within the years 1994–2007 it volume in a non-changed prices increased nearly 8 times (see Figure 5.2). Until 2005 proportion of patients paying for treatment in medical institutions was growing, and only in recent years, this process slowed down (Figure 5.5).

This significant increase in private spending in some way reflects public reaction to the proposal of new medical services and medicines. For the portion of population with an income of above-average pay for medical care is a mean of obtaining better medical assistance. Growing population liability of their health is significant. The hope only on the state gives place to a combination of public and personal responsibility for health. We should add to this the growth of understanding by employers the need to invest in maintaining the health of workers in the form of direct purchase of medical services for personnel or purchasing policies of voluntary health insurance. It is worth noting that similar processes are taking place in many Western countries with the traditionally socialized medicine, such as Scandinavian countries.



Source: Calculated by E.V. Selezneva using RLMS-HSE data, 5 (1994), 9 (2000), 13 (2004), 16 (2007) rounds.

**Figure 5.5.** The percentage of patients paid for various types of medical care in 1994–2007, %

Nevertheless, there are reasons to believe that development of paid medicine in Russia has gone beyond the socially acceptable combination of public and private funding. For most people pay for medical aid is a necessary measure, connected with the fact that to

receive the necessary help for free is becoming complicated. In contrast of educational services consumption, developed on the basis of rational preferences in favor of investments "in future", the consumption of medical services in most cases is imperative: physical condition of the person dictates the need for a medical intervention, for which he is forced to pay. That is why in developed countries we can clearly see the tendency to increase the level of financial protection of the population from high health care costs — particularly by increasing state funding of health care. The average share of private funding in total health care costs in the EU is 24%, and in some countries does not exceed 10-15%. In Russia, according to WHO, the figure is 40%, and according to Russian investigators -45-50%. At the same time the most significant burden of health care costs bear the poorest population groups. The proportion of such expenses in the income of lowest quintile of households in 1,5 times higher than the cost of higher quintile.

We should add to these irrational forms of personal payments for medical services Payments in the moment of consumption health services are dominating, and LCA is developed relatively weak (LCA contributions make only 25% relatively to the volume of paid services). Consumption of fee-based services requires payment of their full value, while in Western countries (and in recent years in many post-Soviet countries), the population does not pay, and pay extra for medical care, a system of small co-payments from patients exists.

The main part of the paid services is provided in state governmental institutions, as opposed to private health care organizations, so patients are often forced to pay for low effectiveness of their activity. Even for a fee you cannot always get quality treatment, since the quality system control does not apply to paid services. There is a problem of an undue consumption; coupled with prescription of not very necessary services, paid by patient ("demand triggered by the proposal). Common to Western countries mechanisms to contain costs and control over the measure of serviceability through LCA in Russian health care are not yet widely spread. This defines the reserved attitude of society towards paid medicine: there is better, but no one guarantees and can tear up the skin.

Other post-Soviet countries also face the problem of shortage in public funds and increasing charges for medical care. But some of them (Estonia, Czech Republic, Hungary, Bulgaria, countries of former Yugoslavia) opposed to this measure to improve the structural

efficiency of the industry. New forms of health care organizations occurred, which increased its accessibility and quality (e.g., the role of the general practice doctor increased, the private health sector occurred, a continuity of treatment at different levels of care increased, network of hospitals was optimized). In Russia it did not happen. The Soviet system was left virtually without changes, and some of its positive characteristics (central role of primary health care, stages of medical care) are largely lost.

Thus, consumption of health services for past two decades is characterized by new possibilities in treatment of many diseases. But its implementation is increasingly dependent on the solvency of the person. An increasing payment for medical care, although it reflects new consumer priorities of the secured portion of the society, nevertheless has gone beyond reasonable limits and does not guarantee a high quality of care.

### 5.3. The housing

In the USSR one of the most obvious deficits was housing deficit. By 2009 the country underwent major reform in the housing sector, including massive free privatization of housing, a fairly well developed housing market is formed, and mortgage lending began to develop. There are hard and painfully reforms in the sphere of housing and communal services, including reducing the size of the budget provision of municipal services and support only of the most low-income families, the transfer of the management for multifamily housing associations housing owners and the formation of professional management companies.

However, despite this, finally it should be assessed if these transformations led to improvement in the housing needs of the population, which groups won and which lost after these transformations.

Such a comparison is difficult in methodological point of view. A particular methodological complexity is a comparative assessment of the possibilities to improve housing conditions, since in the considered period of drastic changes took place in set of methods to improve housing conditions that are difficult to compare.

The study is based, firstly on the statistical data collection and processing of which are performed by public authority of state statistics (in 1989 — State Committee of Statistics, in 2009 — the Federal State Statistics Service), the results of the population census in

1989 and in 2002, sample data on budget researches of households. In the absence of data copyright expert evaluations were used, based on certain hypotheses, as well as expert estimates of other researchers from the publications of suitable period. In some cases, the method of keys (Cases) was used, for example, in the absence of information to compare on the national level comparable indicators for Moscow were calculated. In cases where a direct comparison seems to be impossible due to lack of appropriate institutes, within the framework of the study we used methods of constructing an abstract (imaginary) institute with the characteristics of 1989 or 2009. This approach, in particular, used in estimating the proportion of families that had the possibility to buy housing through their own and leveraged funds, according to the situation in 1989.

To count for changes in the purchasing power of money over past 20 years, the cost parameters were analyzed after normalization. For example, analysis of changes in value of buying or renting housing was carried out by correlating these parameters to the income of the population. The study formulated following conclusions concerning changes in housing provision, the consumption of housing services. During the reviewed period there was a significant increase in the population provision with a total area of housing per person, which increased by 40% in whole Russia, including 44% in urban areas. Not only an average indicator increased but also the median of total housing area, which rose by about 30%. In a somewhat lesser extent -28% - housing provision increased (residential units) in the distribution on 1 thousand people. The growth of the total area of housing provision by 15% is explained by the factor of population decline in Russian Federation in the period under review and by 85% — by factors of increasing in the housing stock.

Dynamics of growth in the total area of housing provision in the period 1989–2009 in comparison to the period 1980–1990 is virtually unchanged. It is statistically possible to speak about a slight increase in average annual growth from 0,3 to 0,32 square meters per person per year, but with the changes in demographic trends we can state a reduction in average annual growth of the total area of housing provision up to 0,275 square meters per person per year. Besides significant increase occurred in the average annual provision growth of a total housing area for the urban population (from 0,24 to 0,34 square meters per person per year) and reduced in the average annual growth of its provision for the rural population (from 0,44 to 0,26

square meters per person per year). Based on available estimates, we can with reasonable confidence state that the general area of housing provision increased in all income groups of households. At the same time provision with a common area of housing in 2009 in all income groups, except the bottom distribution decile of population by average per capita income, exceeded the average level of provision in 1989. With the reduction of extreme forms of housing "underconsumption "(less than 40% of the average provision with total area of housing) the share of households increased with relatively low level of provision — from 40 to 60% of average. Percentage of households with provision in total area of housing, exceeding the average by more than 25%, declined over the period from 31,5 to 26,7%.

Quality characteristics of consumes housing improved by increasing the share of housing funds, secured by separate types of utilities, and also by reduce the share of municipal apartments in the residential fund (from 6,1 to 1,6%). The influence of these factors was stronger than the effects of the deterioration in consumer qualities of the housing stock caused by its aging and reducing in the volume of capital repairs. Estimates proposed by the authors of the integral dynamics index of housing consumption, taking into account all these quantitative and qualitative characteristics of consumption housing, allows us to speak about the growth in consumption of housing in given period per person by 35%.

The proportion of households in 2009 who won or lost due to changes in opportunities to improve housing conditions in comparison to 1989, according to our estimates, is approximately the same — 20 and 17,5% respectively of all households. Among the losers were mostly households with low levels of provision with a total area of housing and low income, the winners — households with higher level of security and higher incomes. Also the total number of families did not change significantly, annually improving living conditions, their abundance and share remained at a comparable level: 1,8–1,9 million, or about 4% of families each year. However, the distribution by the type of housing condition improvements didn't change significantly. Participation of the state in assistance to citizens in improving their housing conditions declined sharply: in 1989 the share of waiting among all families, who improved living conditions, was 73%, in 2009 — only 6,6% (131 thousand from 1,991 thousand households).

Ratio of incomes and housing prices didn't change radically. When using conservative (lowest) estimates of the housing price in

1989 (on those segments, where at that time there were market-based or quasi ratio) calculations show deterioration of the specified ratio by 43% (ratio of incomes and prices in 2009 amounted to 0,57 of their ratio in 1989). The use of middle or upper values from the available range of estimates of the market housing price in 1989 shows a change in this correlation by 2009 in the range of 0,74–0,93.

Ratio of household income and cost on individual housing construction (when calculating the construction cost of a conditional residential building with total area of 100 square meters) also worsened, reaching in 2009 the ratio of 0,78 in 1989. Besides the average size of the individual built house in the corresponding year increased almost 2 times — from 70,6 to 135,9 square meters.

In 1989, the vast majority of families from family groups, having the opportunity to join the HBC or get a land for individual housing construction, had income that are sufficient for providing payments on the relevant loans. However, the necessity to pay an initial payment, almost the only source of which in 1989 was savings of the population, determined the availability of such loans only for 20% of the population, who had the necessary savings. Under the conditions of 2009 opportunities to pay an initial payment rose sharply by selling owned housing, received in the result of free housing privatization of housing.

Percentage of households able to buy standard housing at the own expense and debt, increased almost 2 times — from 10 to 19%. In this case, actual number of families receiving an annual housing credit increased slightly — from about 150 thousand to 178,3 thousand per year. The share of families with an opportunity to move into living quarters with additional room area of 18 square meters (in conditions of 1989 — through an exchange for a fee from the savings, in 2009 — by concluding a sale and purchase housing transactions and a mortgage), increased almost 3 times — from about 20 to 57,7% of the population.

The share of expenditures on housing and communal services in household expenditures in 2009 increased by approximately 2/3 from the level of 1989. This increase was largely associated with an increased availability of the total area of housing and utilities. Estimates of expenditures on housing and public services for comparable housing unit show that in this calculation burden of housing and communal payments increased in this period by no more than 20%. At the same time for a significant proportion of the population, the main income sources for which are wages and pensions, the share

of expenditure on housing and communal services for a comparable apartment increased approximately 1,5 times.

Thus, despite the dramatic changes in system of institutions of the housing sector (including institutions of housing provision for the population) over the past 20 years and a sharp decrease in the participation of the State in the housing sector (including the scope of financing housing construction and housing and communal properties), many comparable key parameters characterizing the functioning of housing sphere and housing consumption of the population, changed insignificantly. This position is explained by the fact that in the reviewed period under the development of market relations in housing could to a larger extent substitute "care" of this sector by the state.

The development of the housing market and the removal with the transition to market economy restrictions existed during the Soviet period provided a large number of possible strategies for improving housing conditions, the ability to better account of the needs and preferences of families with such improvements.

Expansion of choice, of course, due to the increasing number of housing owners (primarily as a result of free housing privatization) with a full set of rights for distribution of their property. However, keep in mind that previous tenants in state and municipal housing stock had (and largely continue to have) a very broad set of rights, in some cases approaching to the characteristics of property rights.

The sharp drop in housing construction (at the beginning of 2000-s its volumes have fallen by more than 2 times in comparison to 1989 and so far haven't recovered) was offset by better use of opportunities provided by the secondary housing market, a sharp boost on development of which was given by the removal of all restrictions on the number of residential units in the property. This has led to more effective consumption of existing housing stock. If in 1989 the secondary housing market, which at that time was mainly represented by quasi market of exchanging housing, resulted in 33% improvement of living conditions, then in 2009 — already 65%. In general, the proportion of those who improved their housing conditions by market ways accounted in 1989 to 27%, and in 2009 — 93,4%.

In addition, the removal of restrictions on land acquisition in the property and for individual housing construction created conditions for a sharp increase in such constructions, and for many families — to change the lifestyle. Not the least important factor in a substantial expansion of choices in implementing housing strategies is the transition from quasi to full market relations: housing became the subject of legal market turnover. In 1989 the future renter of living space could choice between 3–4 viewing orders or multiple options chains of exchange/part-exchange, today for owner is almost no limit for the choice of housing, offered for sale on the primary or secondary market (as well as participation in projects of shared housing).

In addition, the real choice of housing owner affected the quality of the proposal on the primary housing market, which largely accounts consumer preferences, and the transition to the provision of housing and communal services at the expense of consumers — to improvement of housing and communal services quality (for all remaining shortcomings in this area).

The transition to market interest rates of housing lending was offset by increased access to housing credit for all categories of households (not just for obtained land for private housing construction or entered into the housing and construction cooperative), as well as the ability to use selling owned housing to pay the initial payment on the loan.

The average waiting period for the provision of residential premises for families today are registered as in need of accommodation, increased by more than 2,5 times and reached 19,3 years. However, the share of families composed in such account, declined in this period 5 times — this means that most families in this category found an opportunity to improve living conditions without government assistance.

At the same time, the transition to a market economy hasn't let yet to a qualitative improvement in the housing sector. Prospects for improving living conditions have not changed for almost 60% of households: neither in 1989, nor in 2009 there were no real opportunities for such households to improve housing conditions, while the number of winners and losers from the transition to a market economy, according to our estimates, was approximately equal. Also development of market relations has not yet led to an increase in residential mobility. In addition, housing owners in an apartment house despite the increase of their expenditure on housing and communal services, in practice, do not have a fully available right to control these costs and increase their efficiency, despite the formal possibilities to manage the apartment blocks independently.

### 5.4. Privatization

We have already repeatedly stated that as a generalizing assess of the welfare level it is decided to use the indicators of households' income or expenditures. Such an approach is reasonable, but in several moments other factors are significant, which have a significant impact on the level of well-being, although not always directly and immediately. Exactly such time Russia was undergoing in the period we study today but this main feature for some reason was not taken into account. In particular, the income indicators used in statistics do not include privatization.

Probably, the Russian privatization was not carried out by the most correct way, but you cannot deny the fact that in its course households were donated assets that have an astronomical cost. Apartments in Moscow, the land on Rublevsky highway, shares in the richest companies that control the world's largest mineral resources are potentially worth, although not everyone was aware of this in the early 1990's. We do not now speak about social justice. However, from the point of macroeconomic view, there has been the greatest redistribution of property, perfect for the benefit of households. Many gave up their property for a bottle of vodka, but there were also those who fabulously enriched precisely because others did not realize the true value of inherited assets. This could be an unfair redistribution of property within the household sector, but domestic economy as a whole statistically won. However, statistically this does not reflect in practice. Moscow citizens privatized their apartments of market value in hundreds of thousands of dollars each at an average salary, which at the beginning of 1990 amounted to at best several hundreds of dollars. Nevertheless, the wages accepted to account in assessing the level of welfare, and the cost of capital transfers resulting from privatization, usually ignored.

The problem is that privatization has not been properly reflected in national accounts. Market prices for the privatized assets at the time were absent (as in many cases they are absent today), so the National Accounts included privatization transactions in prices, which does not reflect reality. And to conduct today a corresponding analysis based on publicly available statistics is not possible. Nevertheless, the problem should not be ignored. The hope remains that in future it will be properly investigated, and then the picture of the welfare level of the Russians in 1990 will be more adequate.

## 5.5. Capital formation and cash savings

The problem of the privatization is closely related to capital formation and cash savings. Privatization — a royalty-free redistribu-

tion of property in favor of the household, and such reallocation, no doubt, affect the level of their welfare. But the assets (financial and nonfinancial) may not only be redistributed free of charge, they can also be purchased by households. And it is also the feature of wellbeing. Actually, the very appearance of households' addiction to save is an important characteristic of the welfare level.

It is considered that this tendency appeared within a household, if the primary needs are satisfied — food, clothing, medicine etc. Anyway, this is true with respect to the accumulation of financial assets. With regard to non-financial assets, their main species in the case of households are housing and, more recently, the land. Housing also applies to primary needs, and this problem, we will consider later.

To compare the levels of financial assets that were owned by households of Russia in the late 1980-s and 20 years later, is very difficult because, first, it is hard to determine the true level of savings (not all of it is saved in banks, not all — in the form of money and not all — in Russia) Second, methodologically it is unclear how to compare the true cost of even ordinary ruble savings in 1989 and 2009. In this case, it is realistic to talk about assessment of the dynamics, but with the exception of its early period in the beginning of 1990-s.

If we talk about the accumulation of financial assets, households experienced in the early 1990's this catastrophe as a result of hyperinflation. This circumstance broke all pre-existing stereotypes of the saving behavior of households and all the trends. It would be very interesting to examine whether processes of a statistically privatization (positive for households) and the depreciation of savings (negative) are comparable. Unfortunately, today we are not prepared to answer this question.

As for the other years, based on information official statistics, one can observe that the second strongest shock savings was experienced as a result of the 1998 crisis. If in 1994, for savings in deposits and securities the population used 6,5% of the total income, then by 1998 — only 1%. Since 1999, we observe recovery of this share, followed by the fall in 2008. Similarly, the dynamics of the saving share is changing, measured from the RLMS data (Figure 5.6).

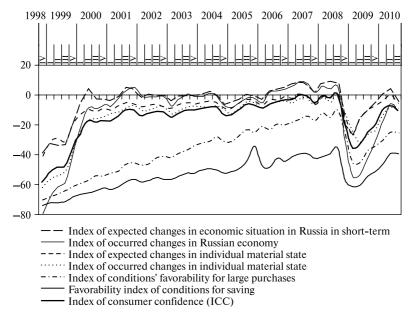
Another indicator by which to judge the dynamics in savings is savings-favorability index measured on a quarterly basis by the Federal State Statistics Service since 1998. Within the period 1998–2008,



- —— Statistics: percentage from the total income volume of the population, used for saving in deposits and securities
- -- RLMS: Did your family save money in the last 30 day?

Sources: Official data of Rosstat and RLMS-HSE.

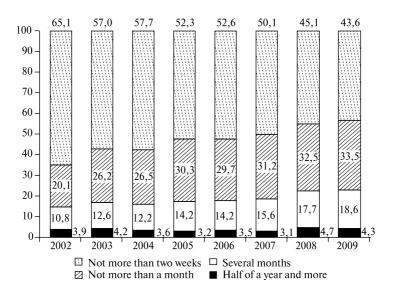
**Figure 5.6.** The share of savings in income of the population and saving behavior of families, %



Source: Official data of Rosstat.

Figure 5.7. The dynamics of consumer expectations of the population

this index increased significantly (Figure 5.7), although it continues to be characterized by the most pessimistic feelings relative to other private indices and the integral index. Moreover, its recovery growth after the crisis of 1998 was prepared and gradual. First, even the fastest growing in material state of households cannot provide households within 1-2 years with sufficient resources to shelve savings, taking into account that the proportion of savings for the period from 1991 to 1999 decreased from 70 to  $10\%^{10}$ . Secondly, unlike income, characterizing the current financial position of households, the saving reflects mostly medium-and long-term financial strategy of households, and in this case, they are slower to respond to improvement in the macroeconomic environment. As a result of crisis in 2008 the saving-favorable index fell to marks of 2001 (-61%), but already in 2010 almost recovered pre-crisis value.



Source: Data of RLMS-HSE.

Figure 5.8. Insurance potential accumulated in the household savings, %

<sup>&</sup>lt;sup>10</sup> Ibragimova D.H., Nikolaenko S.A. Consumer Sentiment Index / NISP. M.: Pomatur, 2005.

Despite these positive developments of objective and subjective indicators of population savings behavior, dynamics of the improvements are still behind the pace as of macroeconomic development and improvement of financial position of households. Savings still only in a limited segment of the household may function as social insurance, or so-called airbags. So, according to the sampling RLMS survey, only 4.3% of families are able to maintain the former level of financial position within six months and more, if all family members lose all sources of income (Figure 5.8). Moreover for about 1/5 of households their savings will last for several months. In most households the figure is no more than a month.

However, if we take as an example social and economic risks such as loss of work one member of the household, it is worth noting that the average duration of job search was in 2008 about 8 months.

# 6. The aggregate index of welfare

Based on the arguments presented above, we are attempting to provide a summary assessment of changes in the level of welfare of the Russian population for the period 1990–2008. We proceeded from the fact that the welfare is formed under the influence of three main factors:

- 1) the ability of households to acquire market goods or services for final consumption at its own expense;
- 2) the possibility to use non-market goods and services, funded publicly and by non-profit organizations (e.g. trade unions) and provided to households free or nearly free;
  - 3) the ability of households to purchase housing.

In order to evaluate the effect of these three factors together, we calculated a code, which is conventionally called the composite index of welfare. We used the following initial data and calculation methods.

- 1. As an indicator of changes in purchasing power of households in terms of the acquisition market consumer goods and services, we used an index of variation of purchasing power per capita income, designed by researchers of the "Expert" Magazine. We remind that this index was 1,45; it is described in detail in the section 3,5 of our report. We also note that this index includes market health and education services purchased by households for its own account;
- 2. To evaluate the possibility to use individual non-market services (usually it includes health-care, education and social welfare), we calculated the following relation. Based on data obtained as a result of the Japanese project of historical statistics<sup>11</sup>, we got the amount of state spending and nonprofit organizations to provide households in Russia with properties of non-market individual services. Then there was the GDP of 2008 calculated in prices of 1990 by published rate of its real growth. After this, we calculated the costs of non-market individual services of the state and NPO of 2008 in prices of 1990, using a made estimate of GDP in 2008 prices in 1990 and the specific gravity of these services in GDP according to the data of 2008. Correlating the levels of total state spending and NPO on non-market individual services for final consumption of households, we achieved an index

<sup>11</sup> See: Ponomarenko A.N. Op. cit.

- 0,93. In other words, total expenditures of the state and NPOs for non-market individual services, taking into account the growth in prices over the past 20 years declined by about 7%.
- 3. To calculate the ability to purchase housing the corresponding index was calculated, made by colleagues from the Institute for Urban Economics. These calculations lead to the following. Initially the possibility of housing purchase was assessed on the basis of average income, in 1989 and 2009. In 1998, the amount necessary to buy a flat area of 54 square meters could be collected within 2,6 year, refusing all other expenses. At the same time an individual dwelling area of 100 square meters could be built with funds equivalent to 3,9 years. Taking into account that the share of individual housing construction in the total number of "improvements in housing conditions "was only 4,6%, the average exponent is calculated, equal to 2,66 years. An indicator calculated similar way to 2009, amounted to 4,64 years. Thus housing affordability index for this period is equal to 0,57. Taking into account different opportunities to purchase housing, it became 43% less affordable for the average Russian citizen.
- 4. Finally, the composite welfare index was calculated as the average of the above indices (Table 6.1). It is calculated by the formula of Fisher, with the use as weights of household expenditures share on final consumption, the total cost of the state and NPOs on non-market individual services, as well as household expenditure on gross savings (an indicator of NAS) in the total dimensional volume of these three indicators in 1990 and 2008.

Calculated in this manner the index was equal to 1,32. That is the welfare of the average citizen in Russia, treated as an aggregate score of possibility to purchase market goods and services, housing and consumption of non-market services increased over the past 20 years, approximately on 1/3. Note that this index was ultimately less than the result obtained by comparing the purchasing power of average income in market goods and services due to that the ability of "average" Russians to buy homes and consume non-market services, paid by the state and NPOs, decreased. The results obtained confirm, in the general predictable result: the market changes led to improvement of the possibility to purchase most goods and services at the own expense of households, while a non-market sector is at best stagnating. A significant deterioration in housing affordability can be tried to explain by the specifics of the industry, because is fully

manifested by two factors -1) inaccessibility of import and 2) the dependence of corruption.

**Table 6.1.** The composite index of welfare and its components

Indicators	Contents	Values	Wrights
The index of changes in purchasing power per capita income	Changes in purchasing power per capita income of the purchase market goods and services	1,45	0,8
The index of the cost of non-market individual services	Change in real government expenditure and non-profit organizations on non-market individual services	0,93	0,15
The index of housing affordability			0,05
Composite index of wealth	Weighted average of the above indices	1,32	

Source: Author's calculations.

The composite index is indicative, i.e., cannot claim an absolutely adequate reflection of the dynamics in final consumption of households. In particular, it does not take into account the consumption of goods and services produced by households for their own consumption as well as possible changes in the share of hidden income. Note also that the composite index of well-being does not take into account the stratification and this new way of life for Russian citizens as unemployment. Both of the last issues are considered in detail in the following chapters of the report.

#### 7. Labor market

The emergence of the labor market — a fundamentally new phenomenon, distinguishing the lifestyle of pre-reform Russia from today. The very existence of unemployment, though small in scale, introduces an element of instability in the public consciousness and makes life one way or another, less comfortable. At the same time the existence of labor market has its positive aspects, especially in parts of enhancing economic efficiency. In any case, the existence of the labor market is an inherent appreciation to complex market economy, and it is senseless to argue if it is bad or good. If we are talking about the market, we have to recognize the need for the labor market and common for it a certain level of unemployment. Another thing is that we should assess whether this level is reasonable and whether there are mechanisms to compensate for negative manifestations of unemployment in social scale.

During the Soviet period, employment was compulsory, wages were appointed by the state in a centralized order, and unemployment in the open form did not exist. Respectively, the statistics of the labor market did not exist. In 1991, the "Law on employment in Russian Federation" from 19.04.1991 № 1032-1 was adopted, in accordance with which labor-market institutions began to develop. In 1992, the first survey on employment was conducted which formed the basis of the labor market statistics. That's why from that moment (since 1992) we will maintain our countdown (addressing to 1991 where possible).

The evolution of the Russian labor market can be divided into three various stages. The first (1992–1998) reflects a deep transformational recession, which lasted almost a decade and was accompanied by a reduction in employment, increase in open unemployment, decrease in length of working time and a sharp fall in real wages. The second (1999–2008) was associated with a vigorous post transformation rise when the situation on the markets quickly began to improve. Finally, a deep economic crisis that erupted in the second half of 2008 marked the beginning of a new, third phase (2008–2010).

In condensed form a special algorithm of Russian labor market functioning is illustrated in Figure 7.1, which presented a trajectory change of GDP, employment, working hours and real wages ffor the period 1991–2009 years. As you can see, employment in the Russian conditions has always remained quite stable and not too sensitive to even the strongest macroeconomic shocks (both negative and posi-

tive). Connection between the dynamics of output and employment dynamics was weak. A decrease in employment during the transformation crisis was less than 15%, whereas the decline in GDP reached almost 40% (the lowest point of the crisis). A similar asymmetry we observed then at the stage of recovery: the GDP has almost doubled (relative to the level of 1998), and the number of employed rose by only 7–8%. High degree of autonomy in respect of employment to any shocks in the economy that occurred within the last 20 years, can be assumed as almost the main "firm sign "of the Russian labor market.

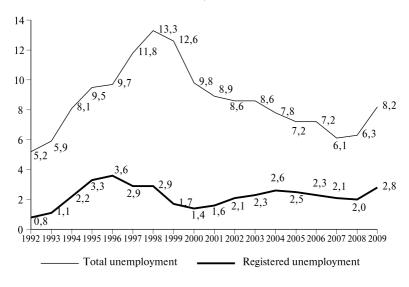


Source: Calculated according to Rosstat.

Figure 7.1. Dynamics of GDP, employment, wages, % to 1991, 1991–2009

As a result of such inertia the level of employment at all times steadily maintained at a high enough mark. Although initially (1992–1998) it fell by about 13 p.p. — from 71,8 to 58,4%, then (in the post-crisis period) it grew by more than 10 percentage points, approaching the mark of 69%. This is not much higher than the average in the countries of OECD, and much higher than in most other post-socialist countries. In conditions of relative stability of employment, it is natural to expect that unemployment should not be too high. Figure 7.2 confirms this, showing a smooth trajectory of change in unem-

ployment without any sharp jumps caused by the one-time emissions in the labor market of large masses of workers. Starting with a mark of 5,2% in 1992, the total unemployment is only in the sixth year of market reforms exceeded 10% and the maximum point -13,3% — was reached in 1998. Taking into account the depth and duration of the transformation crisis, we must admit that during this period unemployment in Russia was maintained at a disproportionately low mark. When the Russian economy has entered a phase of recovery, indicators of total unemployment quickly went down, decreased by mid-2008 more than twice — to 5,5-6%.



Source: Calculated according to Rosstat.

**Figure 7.2.** Dynamics of total and registered unemployment, %

In Russia, the overall unemployment rate has never reached a pick values common for many other reformed economies, and this despite the great depth and duration of transitional crisis. This advantage was conserved by it later, in the face of strong economic growth. (For example, in Poland, Slovakia and Bulgaria during the long period in the 2000's unemployment rate was close to around 20%.)

Initially, a disproportionately low Russian unemployment was seen by many researchers as statistical artifact associated either with low quality of official statistics measuring or not applicability of conventional (too narrow, as stated) definition of unemployment used by the ILO to the transitional economies. However, subsequent analysis showed that in the Russian case, estimates of unemployment are robust according to possible modifications in the definition and dimension. Alternative estimates emanating from the wider definition of unemployment, were very close to the official. In many other transition countries, the transition from conventional to a broader definition of unemployment, which includes various border states in the labor market led to a significant increase in its scale.

As for registered unemployment, it always remains strikingly low. During 1990–2000-s it fluctuated in a narrow range, within 1,4–3,5%, and for example, as for mid-2008 the level was less than 2% (see Figure 7.2). In this respect, Russia presented an absolute "record": no other post-socialist countries could boast such stable low rates of registered unemployment.

The gap between the general and registered unemployment in different years ranges from 3 to 7 times. In this case, the total and recorded unemployment rate changed at clearly not connected trajectories: thus, the peak of the first (13,3%) was achieved in 1998, while the peak of the second (3,5%) — two years earlier, in 1996. This means that the number of registered unemployment began to decline when the total number of unemployment is still growing. And vice versa: in a post-crisis period, you can find a few episodes, when despite the continuous reduction in the total number of unemployed the population of registered as unemployed suddenly began to increase.

These differences can be regarded as a visual confirmation that Russian recorded unemployment was largely man-made phenomenon. Its dynamics has always been determined not so much by the overall situation in the labor market as the organizational and financial capabilities of the State Employment Service (SES), responding to the support of unemployed. When the possibility of SES spread, the registered unemployment began to rapidly go up — no matter what happens in the economy: when they narrowed, registered unemployment began quickly go down — again, without direct connection with the general situations, which at that time was developing in the economy.

What is the cause of the relative stability of employment and lack of high unemployment? It seemed quite natural that, on the one hand, Russian officials should be afraid of entering the open market until the last hold on to the occupied workplaces, and on the oth-

er — Russian companies remaining committed to paternalist views of Soviet-type, have to "hold" available to them labor force, declining from its "reset". Here — the weak sensitivity of employment and unemployment to macroeconomic shocks.

However, upon closer examination, this explanation completely disintegrates. In terms of movement of workers Russia forces far exceeded other post socialistic countries. Ratio of gross turnover of the workforce defined as the sum of the coefficients of employment and retirement, reached 43-62% for the whole economy and 45-65% for industrial sector. Annual "shaking" was subjected from 1/4 to 1/3 of workers in Russian enterprises. Even in a crisis 1990-s recruitment was maintained at an enough high mark — 20-25%. This was a major factor to stabilize employment. (Indeed, in order in the Russian economy "reset" of employment occurred, the proportional to the drop in output, businesses would be sufficient only for 2-3 years to freeze hiring or at least drastically reduce its intensity.)

Another, not less paradoxical phenomenon — the domination of voluntary redundancies. Forced layoffs have not received in the Russian labor market marked distribution. Even in the midst of the transition frequency of such crises layoffs remained insignificant. Dropouts were not more 1-2.5% of staff, or 4.10% of total number of departures. Dominated by the voluntary dismissal, reaching 16-25% of staff, or 65-80% of the total number of departures. Even taking into account the possible disguises of parts of forced layoffs under a voluntary, it is hard to doubt that the vast majority of workers leaving companies did so on their own initiative.

But if the reference to low interfirm mobility labor disappears, and then the "unusual" behavior of indicators of employment and unemployment should be attributed to the action otherwise. Two of them seem crucial: it is flexible working hours and flexible wages.

During the first half of 1990 the duration of working time has decreased by 12% across the economy and on 15% in industry. Then it is just as quickly going upward, rising by 2008 to 6% in the whole economy, and even more — 16% — in the industry. As for the scale fluctuations in working hours were comparable to the fluctuations of employment. Elasticity, which showed rates of working time, helped to stabilize employment and prevent high unemployment. If they remained unchanged, a fall in employment during the crisis period, and its growth in the post-crisis period would be approximately twice more than they were in reality. This contrasts sharply the situation

in Russia with the situation in the CEE countries, where duration of working time remained virtually unchanged during a period of transformational recession and the period of subsequent recovery.

But an even more important factor contributing to stabilization of employment and curb of rising unemployment throughout the discussion period is flexible wages. Its flexibility is provided by several main ways. Firstly, the absence of mandatory indexation of periodic amplitude of high inflation led to a reduction in real pay labor. The strongest "failures" in the dynamics of real wages always occurs during a sharp acceleration of inflation, when the price growth is far came off the pace the growth of money wages. According to official estimates, during the crisis period, real wages declined in Russia roughly 3 times. This dramatic reduction has been carried out in three "jumps", and they were all influenced by the induced strong negative macroeconomic shocks. The first was connected with the liberalization of prices in January 1992, when real wages have depreciated by 1/3, second — the so-called "Black Tuesday" in October 1994, when it dropped more than 1/4, and finally, the third — the August 1998 default, when its decline was over 30% (see Figure 7.1).

The resumption of economic growth spurred by returning process. Although in this period, the inflation in Russia remained by international standards relatively high, increase in nominal wages was significantly ahead. The result was a vigorous recovery real wages with the annual growth rate up to 10-20%. During the post-crisis period, real wages "became heavier" more than 3 times (compared with 1999).

Secondly, a major stake in payments for Russian employees (25–40%) traditionally consisted and continues to consist of bonuses and other incentive payments. This variable part of pay can vary in widely limits depending on the economic situation of enterprises and manager's settings<sup>12</sup>. Managers are entitled to discretion in whole or in part to deprive payments for a specified group of workers or even the entire staff. Due to this, in case of worsening economic conditions of the company, payments will immediately swoop and when they are improving — up. In the extremely unfavorable 1998 the share of the variable part in the payment fund for all Russian enterprises amounted to about 27%, and in absolutely favorable 2007 — almost 36%. A similar dependence is traced not only in time but in space: the bet-

 $<sup>^{\</sup>rm 12}$  Here it may be noted that this mechanism of wages contributes its significant contribution to inequality.

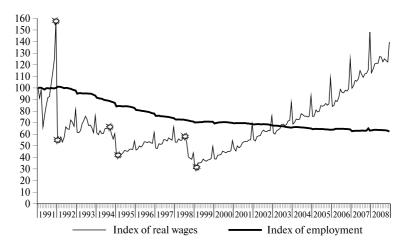
ter economic status of an industry, an enterprise, the higher share of bonuses. For example, in 2007, two the most prosperous Russian industries — oil, gas and metallurgy — the value of premiums and surcharges, even exceed the quantity the basic wage.

Thirdly, another way to reduce real wages were delays in its payments, which, as experience shows usually came to the fore in periods of slowing inflation. Although the delays wages have appeared in the early months of 1992, their peak was in the middle of 1998. Then they covered approximately 2/3 of all employees. In real terms wage arrears increased in times of crisis years, about 10 times. If in 1992–1993 it was less than 1/5 of the monthly wage bill of enterprises, by the end of 1998 — already more than 1,5 of months fund. In other words, in the peak of the crisis the labor force cost Russian enterprises by 15–20% cheaper than its full "contract" value.

The turning point in the dynamics of non-payment was the recovery economic growth. Since its beginning, they started quickly to dissolve. By mid 2008, their volume was less than 2% of the monthly wage bill, and the coverage of employees with non-payment was reduced to about 1%. As a result, problem of delinquency lost any significance. With a sharp deterioration in economic conditions, all these mechanisms — the inflationary devaluation of the real payment and cuts in bonuses, wage arrears and reduction of "shadow" payments — provides a rapid depreciation of workforce in terms of business. This has contributed stabilization of employment, preventing the surge of open-free unemployment. Improving the economic situation gave an impetus to reverse process. As a result, both the negative and positive shocks of the Russian labor market reacted similar way — not so much variations in the number of employees, as in wages.

Sharp contrast in the behavior of these indicators is clearly seen in Figure 7.3, which shows the monthly dynamics of real wages and employment for 1991–2009. If the first almost immediately responded to any, even slight changes in market conditions, the second retained in ratio to them almost complete "Immunity". By intermittent, broken line, reflecting dynamics of real wages, we could, in shallow detail reconstruct the history of ups and downs of the Russian economy in transition. But looking at flat and smooth line, reflecting the dynamics of employment, we would barely manage to guess what happened to it in these years.

Flexibility of wages is largely due to the lack of Russian enterprises propensity to forced layoffs. Reduction of the person, when it was needed, they could achieve much cheaper way — by reducing the wages, thereby encouraging unnecessary employees to voluntary redundancies.



Source: Calculated according to Rosstat.

**Figure. 7.3.** The dynamics of employment and wages, monthly indices 1991–2009, %

The calling card of the Russian labor market model can be assumed a variety of ingenious ways to adapt — Work in part-time and forced leave, wage arrears and payment of shadow, employment in the informal sector and employment in goods and services production in the household of the population. They can be considered nonstandard, because they were non-formal or semiformal and used bypassing, or in direct conflict with existing formal laws and regulation. As a rule, they were first to respond to any shocks, while adapting to a more formalized form occurred later and due to this had more subdued character. In separate years, almost 1/4 of staff of Russian enterprises transferred to reduced working hours, or went in administrative leave, every seven worker was busy by informal employment (outside the sector companies and organizations); in the peak years delay wages covered most of the working population, the informal payments amounted to almost half of the official. Unique phenom-

enon was and remains the activity of households where in the peak of agricultural season, approximately 40% of the adult population produces agricultural products on their land and suburban areas — partly to sale on the market, but mainly for their own consumption. Not surprisingly, from a certain point these ways of adaptation began to be perceived as common practices such as labor standards. Although post crisis period, some of these adaptive mechanisms began to go out of use, others still continue to be actively used, covering a large part of the Russian workforce.

There was a change in the ratio between employment in the corporate and noncorporate sectors. Characteristic feature of the Russian labor market is the steady outflow of employment in the corporate sector to the unincorporated. Corporate sector is formed by employed in enterprises, having legal status — large and medium, as well as small. Traditionally, the core of the Russian labor force was employees of large and medium-sized enterprises. Here is concentrated the bulk of formal employment, and non-standard forms of employment relations practice in exceptional cases. Peripherals are formed by enterprises that do not possess legal personality — selfemployed, employed for individuals, families workers, etc. Here, employment is largely informal and non-standard labor contracts are widely used. The distinction between corporate and unincorporated sectors is fundamentally important because they showed a completely different dynamics of employment (even more "failed" the employment of large and medium-sized enterprises — up to 55%). In the crisis period, employment in medium and large enterprises declined faster than the economy as a whole, and what is more surprising, continued steadily to decline even in post-crisis period. Average number of workers declined by more than 1/3 — from 59 million in 1991 to 37 million in 2007 (more than 5 million jobs have been lost by them in the 2000's in terms of rapid economic growth!). As a result, if, before the beginning of market reforms their share accounted for 80% of total employment, it is now — just over 50%.

Inverse dynamics was demonstrated in unincorporated sector. In 1991, it accumulated about 5 million people, or just over 6% of total employment, whereas in 2007 already 19 million people, or nearly 30% of total employment. It is obvious that this segment of the Russian economy have an important damping role: if the unincorporated sector absorbs the surplus labor, which was "dropped" by corporate sector, unemployment in Russia could be much above. With more

flexibility and greater resistance to cyclical, it served as an effective buffer mitigating multiple shocks.

The above assessment is only partly reflects the employment population in agricultural production in households. We are talking about a giant economic enclave of self-sufficiency in the operation of which a huge part of the Russian population is involved. According to LPH in average during the year in LPH about 23 million people are employed (approximately one in five adults is Russia), and in the peak of agricultural season — 35,5 million people (approximately one in three adult citizens of Russia). It is almost 5 times (!) exceeds employment in the formal sector of the Russian to agriculture. The manufacture of products for the sales on market involves a minority of people employed in LPH (less than 20%), whereas the overwhelming majority (over 80%) produce it not for sale but only for a final consumption in their families.

It is estimated that approximately 2/3 of Russian households have the land in their use. Compared to the end of 1980 in the beginning of 1990 the number of households with land increased by about 1/4, and the area of land used by them — almost tripled. Expansion of economic activity LPH occurred uneven. Accelerated growth was outlined already in the Soviet period, but in 1990–1992 because of the beginning of mass distribution of land it purchased explosive. The peak in lawn and garden activity of the population, apparently occurred in the first half of 1990. Production in the LPH became an essential element of the strategy of survival, which in conditions of the transformation crisis followed by the predominant part of Russian households. In the post-crisis period, when real incomes began to rise rapidly, the need for its products began to gradually weaken. However, even now the scale of the Russian sector of self-economy is enormous. It is suffice to say that households currently produce about half of all the products of Russian agriculture (In the pre-reform period, their share in production was almost twice less).

Thus, as applied to the measurement problem of well-being we can say that the unemployment yet hasn't much influence it. But there is a mediated effect — by increasing inequality.

# 8. Inequality

Formation of market relations in Russia is accompanied by rapid growth of inequality in the distribution income. Of course, the wealth inequality in certain dimensional form was also inherent in Soviet society, as any another. However, in the USSR, it is not of a mass character. It is safe to say that is just unnecessary, "the equation" in the standard of living adversely affected the efficiency of the Soviet economy development.

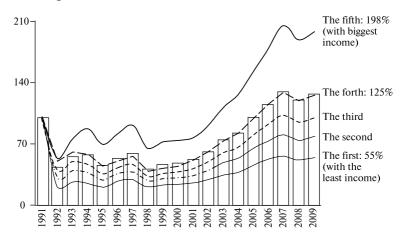
From a statistical point of view the following is important. When we are talking about the average levels of income, expenditure or consumption, implying that these indicators are characteristic of well-being, we keep in mind that the distribution of households in each of these signs is subject to the normal law, i.e. founding trends common for most members of society. In other words, the quantitative characteristics of the welfare level in the classical case are determined by quantitative governmental performance level of the middle class<sup>13</sup>. If not, if the inequality is too large and average statistical indicators of welfare are not typical for most households then such averages are the same as "average temperature of the hospital" and public opinion consider it extremely skeptical. According to official figures of Russian statistics in 2008, 60% of the population with the lowest incomes accounted for only 29,6% of revenues, while the share of 10% richest had 31,1% of all income<sup>14</sup>. With such distribution it is not surprising that the majority of the Russian population perceives the official data on average level of income and consumption as fiction of conscientious statisticians.

Negative subjective perception of average statistics indicators relates not only to indicators of the level welfare, but also to the dynamics of change in these indicators. The above-described average income dynamics is the closest to the fourth quintile (20% part) of the population according to income (taking into account the fact that this is the first quintile group with the lowest income). 20% groups with incomes lower than in the forth group, characterized by significantly lower income growth rates (Figure 8.1). So, in terms of real cash income households in the third quintile group only by 2007 reached the

<sup>&</sup>lt;sup>13</sup> In this case, it refers to a purely statistical representation about the phenomenon of middle-class, i.e.it is the combination of households, quantitative characteristics of income and expenditures that are close to the average for the population.

<sup>&</sup>lt;sup>14</sup> Social Situation and Living Standards in Russia. 2009 / Rosstat. M., 2009.

1991 level, and household from two the most disadvantaged groups are still below this level. Fifth, the upper 20% group, by contrast, substantially isolated from the rest of households having increased income for the period more than 2 times. Described situation is further evidence of the high income differentiation of Russian households.



Source: Authors' calculations based on official data of Rosstat.

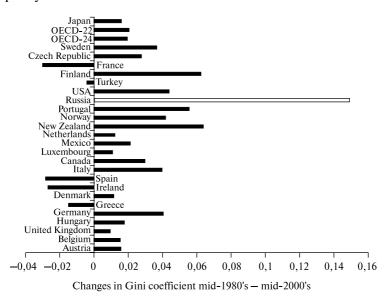
**Figure 8.1.** The dynamics of real incomes in 20% income groups, 1991–2009. %

The foregoing applies equally to the results, we obtained in the course of this project. It is quite likely that they will be perceived as being too optimistic, as intended for the household sector economy as a whole, while most of the households have lower living standards than is obtained when calculating averages.

Among the authors of this report there is the consensus on the fact that excessively high levels of property inequality is now one of the most important problems in contemporary Russia, which largely negates the economic and social achievements of recent years. Of course, income inequality is not only Russian phenomenon. Researchers attributed the growth of inequality and poverty to basic socioeconomic risks posed by globalization<sup>15</sup>. Presented at the Figure 8.2

<sup>&</sup>lt;sup>15</sup> *Porter M.E.* The Competitive Advantage of Nations. L.; Basingstoke: MacMillan, 1990; *Landes D.S.* The Wealth and Poverty of Nations: Why Some Are So Rich and Some So Poor. N.Y.; L.: W.W. Norton & Co., 1998.

estimations of growth of income inequality for the countries — members of OECD, indicate that, during the mid-1980 — mid 2000-s the inequality increased significantly, almost in all countries — OECD countries. But the growth differentiation in Russia was much higher than similar indicators for Eastern European countries with economies in transition. For example, in Hungary coefficient Dzhini<sup>16</sup> in 20 years, beginning from the middle of 1980, rose by 0,018 points, while in Russia for the same period it rose by 0,149 points, while inequality in Russia on the eve of the reforms was lower.



*Note:* The Gini coefficient for Russia are taken from official statistics, calculated on the basis of cash income index per capita. For the OECD countries, rates are based on measures of income using a scale with a coefficient of elasticity of 0,5. The index of the mid-1980's is equal to 1990.

**Figure 8.2.** Dynamics of income inequality (Gini coefficient) in the OECD countries and Russia, %

 $<sup>^{16}</sup>$  The Gini coefficient is the most popular index of inequality. Its advantage is that it shows the differences between all the profitable pairs in the sample. Index value equal to 0,400, means that the difference between two randomly selected income is 80% of median income. Gini index takes values from 0 to 1 (0 — in case of absolute equality in the distribution Research income, 1 — in the case of perfect inequality).

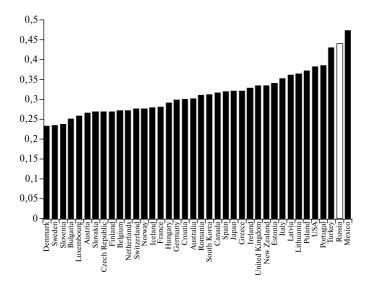
At the moment, the level of inequality in Russia is higher than in all EU countries and countries — OECD and is comparable to the indicators of Turkey and Mexico (Figure 8.3).

The problem of poverty is closely adjacent to the problem of income differentials. To understand what happened to poverty in Russia since the early 1990's, we turn to the dynamics of poverty rate, its depth and profile. In most cases, we will be guided by macro statistics data but separate subjects, in particular the poverty profile, will require the involvement of representative results of sample household surveys.

In Russia, the poverty rate measured by the proportion of the population with incomes below the subsistence minimum (SM), which set at the minimum consumer basket, calculated by the regulations. For setting the lowest possible life level approach on the concept of absolute poverty is applied, orients on the most important standards of consumption goods and services on the minimally acceptable level. Fundamentally different approach oriented to the prevailing in community consumption standard, is used in European countries. There a poverty line is at the level of 40–60% of median income.

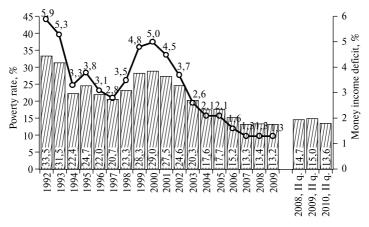
During the period of market reforms, the level of income and poverty were subject to considerable fluctuations. In 1992, 1/3 of the population was below the poverty line and the revenue shortfall at this time amounted to 6% of total money income (Figure 8.4). A gradual reduction of poverty and cash income deficit with the economic crisis in 1998 changed to rising dynamics. However, since 2001 a steady decrease, of the considered parameters is seen: the period from 2000 to 2007 the proportion of poor declined by more than 2 times. The recent crisis of 2008 was less significant for impact on poverty than crisis of 1998. When comparing data for the first 6 months of 2008 and 2009 the poverty rate increased from 14,7 to 15,0%. Obviously, that in the II quarter of 2010 the proportion of poor people much decreased and returned to pre-crisis levels. Annual data suggests that in 2009 the level of poverty reached the minimum value in the history of the post-soviet period.

Indicator of poverty is simple to use and understand, however, it does not give any idea of how poor are certain population groups. For example, in running the policy aimed at improving the situation of the very poor, we cannot withdraw them from poverty, however, significantly improve their material position. In this case, much more



Source: OECD data.

Figure 8.3. The Gini coefficient in the mid-2000s



Poverty rate, % of total population (left scale)
 Money income deficit, % of total money income of the population (right scale)

Source: Official data of Rosstat.

Figure 8.4. Poverty in Russia, 1992–2009,% of total population

adequate assessment of poverty dynamics is given by a income deficit index, characterizing its depth.

Russian macro statistics appreciates the depth of poverty as the amount of revenue that you want to pay all the poor so that they have ceased to be such, in percentage expression of the population total income. From 1992 to 2009 income deficit decreased by 4,5 times, while the level of poverty decreased much less, indicating that the sensitivity of income deficit not only to the depth of poverty, but also to a change in the overall level of income (see Figure 8.4).

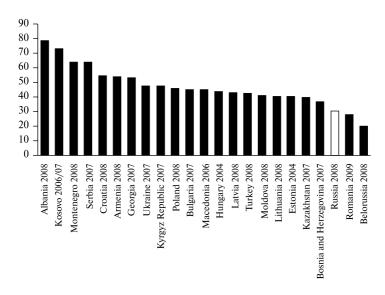
Among other things, the poverty gap indicator is important for understanding the role and place of social support in general strategy for poverty reduction. The share of benefits in the structure of income is comparable to data for Europe. However, fundamental differences are identified in the structure of benefits. In the current system of social support in kind and cash to certain categories of citizens continue to be prior. In Russia the share of benefits for the poor constitutes a small percentage of total benefits.

According to the World Bank, in 2008 the share of benefits received by the poorest quintile of the population of our country accounted for 29% of all benefits. At the same time this indicator in Albania, Kosovo, Montenegro was 78, 73 and 64% respectively (Figure 8.5). The degree of targeting of social assistance for the poor in Russia is comparable with data for Romania (28%) and falls short of data on Belarus (20%).

In order to consider which layers of poor are leaving the group over time, we turn to a income deficit in per capita per month as a percentage of the subsistence minimum.

Throughout the 2000's it ranged from 30,1 to 31,6% (Table 8.1). Thus, reducing the proportion of people with incomes below the subsistence minimum is not accompanied by a decrease in poverty depth. Consequently, over time those who are close to the poverty line live the poor category..

In addition to the level and depth of poverty important characteristic is the profile of poverty. It helps to understand which sociodemographic groups differ by an increased risk of falling into poverty and depth poverty. As mentioned above, the profile of poverty can only be assessed on the basis of survey data on households. We turn to the households' budget survey (HBS), which provides information on the composition of the poor.



Source: Database of the World Bank "Social Protection in Europe and Central Asia".

**Figure 8.5.** The degree of targeting of social assistance,% of all benefits received by the poorest quintile of the population

**Table 8.1.** Lack of income per capita per month, 2000–2008, % of the subsistence minimum

	2000	2001	2002	2003	2004	2005	2006	2007	2008
The deficit of income per capita per month as a proportion of the subsistence minimum	30,5	31,6	31,0	31,2	30,4	31,0	31,2	30,1	30,7

Sources: Social Situation and Living standards in Russia. M., 2003; 2009.

The priority groups for policy on poverty reduction are those groups that contribute to the removal from the number of poor

people the most numerous categories of families, and groups of the poorest households. The main features of Russian poverty profile were repeatedly described in literature <sup>17</sup>and go to following:

- families with children and children under 16 years distinguish of the highest risk of poverty, which is twice higher than the average level:
- with increasing number of children in the household risk of poverty increases;
- single-parent families with children often fall into poverty than full families;
- families of pensioners (both living alone and couples) have the risk of falling into poverty 2 times lower than average;
- unemployed, economically inactive recipients of social pensions and disability pensions have high risks of poverty;
- the total number of poor working recipients are well represented:
  - villagers are 2 times more likely to be among the poor.

Tesliuc E., Ovcharova L. Poverty and Inequality in Russia: the Dependence of the Statistical Indicators of Poverty and Inequality on the Method of Measuring Well-being of Households. Illustration Based on NOBUS / under general ed. R. Yemtsov. M.: Alex, 2007. P. 17–19; Income and Social Services: the Inequality, Vulnerability, Poverty / ed. by L.N. Ovcharova; NISP. M.:. HSE Publ. House, 2005; Review of Social Policy in Russia. Early 2000's / N.V. Zubarevich et al.; ed. by T.M. Maleva; NISP. M: NISP, 2007.

# 9. International comparisons of welfare levels

Conducting any comparisons requires some base from which the corresponding indicators can be compared. In the previous section we made a comparison of walfare levels, using the year of 1988 as a base, because it was the last stable year before the start of the active economic transformation. This method is natural and commonplace, but in the case of dynamic comparisons conducted for a sufficiently long period, it has significant drawbacks. First, the neighboring (and competing) economies over the reference period are not standing still, and actively developed. Thus, comparing Russia in 2009 and Russia in 1988, we seem to overlook that the rest of the world during this time has gone forward. There is also one more drawback — the base period and period matched to the base can be qualitatively incomparable. If we are talking about comparing the quality of life in the pre-reform and modern Russia, this conflict can lead to a simple statement — we are living not better or worse, we began to live differently. For example, we started to consume certain foods less, but the number of cars per capita grew at times, not to mention the fact that there were mobile phones and the Internet.

The problem is to some extent be solved by introducing a dynamic base for comparisons, i.e., an ideal or real system, which would change itself in time, reflecting the kind of reference state of the economy, which at present can be considered normal. In other words, mobile phones and the Internet in such economy are also present.

For example, you can compare living standards in Russia in 1988 and 2009 with the same in time standard of living in U.S., average living standard in Europe, in countries — members of the OECD, with an average living standard in Eastern and Central Europe etc. — the results of this evaluation will give us an understanding of how Russia has changed in terms of its economic development not in comparison with itself decades ago, with its neighbors.

This type of comparison is usually carried out by comparing the volume of GDP in the countries listed in comparable form using the so-called purchasing power parities of national currencies (UN International Comparison Program — ICP UN). Russia officially involved in the ICP since 1993. These comparisons are carried out in terms of GDP per capita, as well as of its basic units including exponent of ac-

tual final consumption per capita. This figure, as we explained above, is well suited for characterization of living standard in the country.

In other words, as a result of ICP we get a dynamic range, which gives an indication of how the standards of living in Russia changed since 1993, with respect to living standard in other countries (comparisons can be made with any country or a group of countries, participating in the program). However, the existing number of ICP UN results is too short to answer the question whether we became closer to the international standard as compared to pre-period of reform or further away from it.

Fortunately, comparisons based on purchasing power parity in the USSR were carried out before, starting from 1959, their overall methodology was generally comparable to that which is currently used in ICP.

Comparisons were conducted within the framework of Comecon. With this information, a dynamic range can be extended and we can find out how the relative level of life in Russia changed in comparison to other countries that have passed, as it, a transition period.

ICP results of Comecon have never been published fully before in the open press, and were marked "For official use". Therefore, we can hardly doubt in its impartiality. However, currently these materials are preserved and accessible. In particular, at our disposal data is available on the results of international comparisons of the Comecon on the basis of purchasing power parities of national currencies in 1988.

Based on these data comparison of living standard were conducted in Russia and some countries — the former members of Comecon. For this reason it was necessary to solve several important methodological and practical problems.

- 1. In comparisons of Comecon the USSR took part, not Russia. Therefore, to ensure comparability between the pre-reform and post-reform series it is required to link the macroeconomic indicators of Soviet Federative Union Republic of Russia (SFURR) and the USSR. We used statistical data from the relative years and calculated conversion factors for the relevant indicators. For example, national income per capita in the SFURR was 19% higher than the corresponding figure in the USSR. In this case, we proceeded from the admission that the purchasing power and the structure of national income in the USSR and SFURR are comparable.
- 2. Comecon comparisons were based adopted in statistics of the socialist countries at that time indicators of national income (net material product NMP), while in ICP GDP and its aggregates are used including the rate of actual final consumption.

Fortunately, the Comecon experts also conducted the comparisons for some countries on the basis of the indicator "Total consumption by the population of material wealth and intangible services". By the description this figure is identical to the index of actual final consumption of households in SNA.

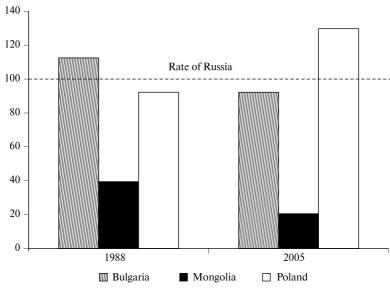
Further consultations with experts of the former Comecon, who participated in this study in 1980 confirmed that this figure was specially introduced into the program to ensure that in future the possibility of linking it with ICP.

Seized the open opportunity, we made necessary comparisons and got the results shown in Figure 9.1. Comparisons were made between SFURR and 1) Bulgaria, 2) Poland, and 3) Mongolia. Other countries participating in the comparisons — GDR, Czechoslovakia and Yugoslavia — have ceased to exist. Romania participated only in the comparisons based on figures of NMP. For converting data of the USSR in the data of the SFURR coefficient of 1.06 was used corresponding to the ratio of consumption indicators of material goods per capita in USSR and SFURR in 1988, it was assumed that the specific weight adjustments for personal services rendered by the public sector in the USSR and the SFURR are comparable.

As you can see, Russia transformed to a market economy more successfully than Bulgaria and Mongolia, but much worse than Poland.

Of course, the results are interesting and important, but we would like to be able to compare indicators in Russia with the indicators not only of countries — the former Comecon but also the U.S., since this country is generally used in international comparisons as a universal standard. Opportunity for such comparison was found. The fact is that Poland participated not only in the comparisons of the Comecon. In 1985 the country took part in the International Comparison Program in Western countries. In other words, it was possible to use Poland as a bridge for comparing performance of Russia and the U.S. For this we made two additional calculations: 1) went from 1985 (year of round in ICP) to 1988 (year of comparisons by Comecon) by comparing volume growth rates of GDP of the RSFSR and Poland and 2) calculated the ratio of indicators of actual final consumption and GDP in the Polish economy, which we also extended to Russia. Missing information on the round of international comparisons of 1985 was received by request at the World Bank. The growth rate of Russia's GDP was estimated based on data from the Japanese project on historical statistics<sup>18</sup>.

<sup>&</sup>lt;sup>18</sup> See: *Ponomarenko A.N.* Op. cit.



Sources: Rosstat, SEV, authors' calculations.

Figure 9.1. Actual final consumption by purchasing power parity

As a result, we obtained the following data.

**Table 9.1.** Indices of physical volume of Russia's economy in accordance tp PPP (%, U.S. = 100%)

Index	1988	1993	1999	2002	2005	2009
GDP per capita	37	20	18	22	25	40
Actual final consumption per capita	22	17	15	16	28	_

Sources: Rosstat, authors' calculations.

The data shows that Russia has significantly worsened their macroeconomic performance in the early 1990's compared to the U.S., but then restored its positions which had existed before the beginning of the transformation. Furthermore, as regards actual final consumption, these positions were already restored in the first half of 2000s, while as regards GDP only by the end of the period.

#### 10. Conclusions

This report is aimed to the limited and moreover an extremely difficult task: to compare the levels of well-being of the population of Russia before the reforms and now, after 20 years, rich in deep transformations, virtually changing socio-economic system. The first decade was occupied by a transformational crisis, which began with market reforms and ended with the financial crisis in1998. During this period, GDP declined by 40%, industrial products — 55%, investments — 80%. Then, during the next 10 years, the economy scale was restored; in 2008, GDP amounted to about 108% from the levels of 1990.

The word "approximately" can be set over any of the figures in the report, since such a long period and so profound socio-economic changes in all statistical calculations should be initially recognized as very approximate. But sometimes rough score or more independent estimates obtained by different methods, have more confidence than the figures with the five characters after the comma.

Thus, the results are roughly following.

1. From 1990 to 2008 the level of the average current market consumption at the expense of households in Russia grew by 45%. The aggregate index of welfare, which besides current market consumption accounts the changes in the affordability of housing (i.e., the most important elements of household savings), as well as individual non-market services (health, education and social welfare), gives a more modest result — an increase of 32%.

Thus, we are convinced that there is no decline today in average living standards of the Russian population, compared with the pre-reform level. In contrast, after the worst crisis we have restored the extent of the economy and the level of life in general, markedly increased.

2. Outpacing the growth of welfare, compared with GDP growth is due, in particular, to the increase in the share of consumption and a reduction in the share of savings in GDP by about 10 p.p. While still to increase the pace of economic growth increase in the accumulation of at least 25% of GDP is highly desirable, yet these structural changes should not be interpreted unambiguously negative, for example, "decumulation" by people of their future — as it was said by one of competent experts. In contrast, during the Soviet period the set of consumer products was determined not by demand

but by a plan. Produced machines or fighters could not be offered to the public, especially since foreign trade was focused mainly on close imbalances, rather than the balance of the consumer market, or improvement of efficiency. Then the formula of the investment regime assumes the maximum increase in capital investments with their low efficiency: growth of stocks was a major factor in the growth of the economy.

Market reforms were supposed to lead to replacement of this formula on the reversed: the maximum efficiency with limited capital expenditures. We cannot say that such a change occurred. But the costs decreased at least because that investment became largely private and it is better counted. As for the effectiveness, there is no enough evidence of its significant growth what should be dealt separately. But the obvious shifts in favor of the second formula are available. This is one of the important outcomes of market reform, in general positive, from which people won, perhaps at the expense of growth. The market takes into account their demand rather that a plan.

3. Today also doubts are expressed whether there is the market economy in Russia. This example shows: yes, there is, the reforms have achieved this goal and in the country over the past 20 years, deep and fruitful changes were made. They were not always "white and fluffy", occurred through the redistribution of rents, criminalization, corruption, raiding, arbitrariness of officials and law enforcement agencies, and many other negative phenomena, which are still not only ceased, but often continue to grow. Nevertheless, as shown in our report the market economy in Russia has become a fact, in this decisive point, we came out of the impasse of planning and distribution economy and returned to the backbone trajectory of global development. This means that for the country prospects are opened that it was deprived before.

There are also allegations that the path of reform was too heavy, that their strategy was wrong, and, for example, a more moderate strategy should have been chosen, even if it needed for more time. Now, apparently, this argument will not be resolved, each will remain unconvinced. But the satisfaction can be seen in the fact that the important, most thankless, but necessary part of the work is done. You can begin to solve other, also complicated, but more constructive tasks.

We decided to bring these positive, optimistic, we can say, findings to express the respect to any persons or existing order. But now more and more apocalyptic conclusions and predictions are spread, along with the official optimism. In this situation we believe assessments of historical changes in our country are in particular timely.

**4.** In the last 20 years have witnessed important changes in consumption patterns and lifestyle of Russians. The share of expenditure on goods and services declined from 75,3 to 69,5% with the increased share of property acquisition (from 0,3 to 2,9%) and financial assets (from 12,6 to 17%). The proportion of positive earnings decreased. But for the purchase of vehicles in 2009 6% of cash costs were spent against 1,7% in 1990. Thus we can state the growth of market, monetary relations.

The share of housing which construction was funded by the population on their own and on borrowed funds increased from 13,5% in 1989 to at least 76% in 2009.

In higher education institutions at their own expense in 2009 55% of students were enrolled, whereas in 1990 it almost didn't occur. Rapid growth in number of students in those years for the most part was financed from private sources. Private expenditure on public health services accounts today, according to rough estimates, to 50% of government expenditure on health care. Thus, in this period the process of housing marketization was observed, as well as education and health services despite the state's obligation to provide free services, at least the last two industries. In fact, consumer demand and its costs in these areas are largely due to structural changes in the level and way of life for our citizens. The estimates used in the report on decreased amount of individual non-market services provided by the state and NPOs by 7% from 1989 to 2009 should be considered in conjunction with the increase in private costs for these services. Similarly, the availability of home purchase or improvement of housing conditions was estimated, which showed the decline in housing affordability in 2009 by 5% against 1989. This leads to a lower composite index of well-being compared with the index of current consumption.

In general, these changes should be evaluated positively: although along with costs of the population was rising, replacing the lack of public funding, an irreversible process took place to better meet the demand of the population.

Here we face a serious problem. It's essence that you do not meet the needs of the population for free, i.e. at the expense of the state or corporations. As for other commodities, the demand should be limited be the price, i.e. costs of the buyer. If we have a market economy, its laws should be considered everywhere. This does not mean that the obligations for free provision should be repealed. But they should be limited to medicine, for example, by a program of free medical care, in education there must also be certain restrictions. But we should keep in mind that health care creates an almost unlimited demand, and can be a powerful driver of the economy, working closely with health insurance. Education is needed for both the citizens and society. Skilled labor in accordance with the demand on labor, plus the selection and promotion of talent are becoming an increasingly important factor in productivity growth, fueled by innovation and its dissemination. Here the state participation in expenditure probably should be higher.

In our view, the materials of the report show that the development of housing markets, health and education is absolutely insufficient, and it is largely constrained by attention, mainly to the public sector in these industries and an underestimation of the important role of the wages policy. Ultimately, the maturity of the market economy is determined by whether the majority of the population relies on the income which allows getting desirable housing, quality health care and education. Not by limits, but mostly for money, using credit and insurance.

5. The principal issue for the Russian economy and society is the current level of inequality. It's not enough to improve living standards on average; there is a need to achieve its optimal distribution. Our study suggests that the growth of welfare, which became possible by creating a market economy, involves only the successful upper, the wealthiest 20% of the population. The share of the top two quintiles accounts for half of the total increase in revenue. Third quintile just reached the 1990 level, while 40% of the population with the lowest incomes is paid less than before the reforms.

The report includes data showing that in Mexico (you can add to it Brazil), differentiations in income are even more. But this should not reassure us. High level of inequality, the more increasing, can be the source of distrust in society, and therefore a threat to the stability. Significant increase in wages in the public sector, which is always the most accessible object for saving, in a package with measures to increase efficiency and reduce the number of employees are represented with regard to this as a necessity. At the same time this will lead to an increase in earnings which are equal to the lower level in

the public sector. This will be a difficult challenge for businesses that will have to raise funds, including measures to increase productivity, introduce new technology. These difficulties can be compensated by giving entrepreneurs more freedom to maneuver, reducing corruption pressure from the bureaucracy and security services, improving the protection of property rights and personality and other measures, leading ultimately to democratization, and other institutional changes, which build confidence and propensity to innovate.

In concluding our report, the authors express their general opinion that its results are better than we expected. Including the fact that not all was managed to do this time, but we have opened a promising new direction of investigations. We hope that readers will have a similar impression, and we'll see over time a lot of interesting new studies, developing the themes outlined here.

#### Scientific publication

# Mode of life and living standards of Russian population in 1989–2009

Managing editor *E.A. Berezhnova*Art editor *A.M. Pavlov*Computer-aided makeup and graphics: *N.E. Puzanova*Proofreader *M.S. Kovaleva* 

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