O. Kuzina

PUZZLES OF SAVING BEHAVIOUR
OF RUSSIAN HOUSEHOLDS

The main goal of this study is to reveal and explain the patterns of saving behaviour of Russian households as well as to find out if models of consumption smoothing can be rejected on the basis of Russian data. The driving force to write this paper has come from the idea that sociological perspective can substantially contribute to current academic debates about modelling of saving behaviour of households. The notion of different forms of capital financial, human, cultural, and social are introduced in order to put special emphasis on the idea that consumption smoothing in different social contexts can be implemented by using different tools.

Olga E. Kuzina. Associate professor, Department of Economic Sociology, Higher School of Economics, 3 Kochnovsky proezd, Moscow 125319, Russia.Tel. (+7095) 291 20 15; e-mail kuzina@serviceline.ru

1. Problem area[1]

Nowadays personal savings are brought to the centre of debates on economic and social policies for a number of reasons, including encouraging home investments and economic growth, and elaborating policies against poverty and for designing new pension policy schemes. Saving behaviour of households was first addressed by macroeconomists. In the mid 50s after the initial period of approaching to this question[2], Modigliani set up the Life Cycle model and Friedman elaborated on this with the Permanent Income Hypothesis which pointed at a strategy of consumption smoothing employed by a forward-looking rational agent whose consumption and saving decisions are taken as a part of an inter-temporal decision process. These models are still regarded as the prominent way of thinking about household savings in market economies.

Since consumption smoothing behaviour is assumed to be universally rational, the same models are considered to be a valid explanation for personal savings in developing and transition countries as well. However, in contrast to this assumption, empirical work, which has been focused on the stylized facts concerning the households' saving behaviour in transition countries, indicates tendencies conflicting with both theoretical grounds and saving patterns in the affluent industrialized countries. Instead of hump savings, the puzzling U-shape forms of savings-age profiles were revealed. What is even more crucial is the fact that Russian data[3] shows that the majority of Russian households in all age groups do not engage in saving, negative or positive, at all, which implies that either they do not smooth consumption, or they do not use financial savings as an instrument for its smoothing. As a result, one can conclude that in transition economies, the data seems to contradict the basic assumption of both neoclassical economic models of consumption smoothing (PIH/LCH).

2. Main purpose of the study

The main goal of this study is to reveal and explain the patterns of the saving behaviour of Russian households as well as to find out if models of consumption smoothing can be used for understanding consumption and saving

---

[1] Comments of ICEF research seminars' participants, and financial support of the National Training Foundation is gratefully acknowledged.

[2] The history of economic theory of consumption and savings starts with the work of Irving Fisher (1930) and John M Keynes (1936).

[3] Data of Russian Longitudinal Monitoring Study (RLMS).

decisions of households in Russia. The understanding of the saving behaviour of Russian households is an important issue both in theory and for policy. Theoretically it is an important question if PIH/LCH is a universal framework which can be used to understand the saving behaviour in the transition countries as well as in the countries with well-established market economies. For transition economies, investigating patterns of private household savings is important in many aspects. It is mainly because the division of income into consumption and savings concerns one of the most fundamental household decisions which influences most other decisions, and at the same time, it is a social policy relevant issue. The question which is relevant to social policy in Russia is whether individuals approaching the retirement age are able to come up with resources for their retirement in spite of the U-shaped saving-age profile.

The driving force to write this paper has come from the idea that sociological perspective can substantially contribute to current academic debates about modelling of saving behaviour of households. Even though economics and sociology have been hostile to each other for a long time, nowadays they are less and less perceived to be mutually exclusive. Whereas they are not jointly used very often they are beginning to be of a great interest to each other in developing theories and generating research hypotheses.

3. Main logic of the paper

I start with the idea of neoclassical economic models that personal savings cannot be explained by household current income alone. Then I focus on the discussion about the fact that in many researches it was found that private consumption tends to be more sensitive to the current disposable income than is consistent with the permanent income hypothesis, and I look for different theoretical ideas in economics which could help to explain the revealed excessive sensitivity of consumption to income. I use the notion of different forms of capital: financial, human, cultural, and social, in order to put special emphasis on the idea that consumption smoothing in different social contexts can be implemented by using different tools. Strategies of 'investing' into non-financial capitals are not mediated by savings, e.g. using money in a way which postpones their consumption for the future. On the contrary, they are consumed in the current period. That is why, in spite of the facts of excessive sensitivity of consumption to incomes, the strategy of consumption smoothing does not disappear. Using different data sets collected in Russia I assemble and evaluate evidence to support this idea and to consider it against other plausible alternatives.

4. Economic theory of savings

The history of economic theory of consumption and savings starts with the works of Irving Fisher and John M Keynes. Fisher introduced the multi-period model based on an explicit assumption about the rationality of saving decisions and their ability to be forward looking but he did not specify the exact form of it. Keynes formulated the fundamental psychological law, partially basing on the findings of budget studies, of increasing consumption as income increases but not by as much noticing that statistics showed that the saving rate had been increasing along with income growth. Keynes also stated that past consumption habits affect current consumption, but he did not say anything about information on expected future incomes.

Empirical work verified Keynes's consumption function, empirical problems soon arose. Forecasts of depression after World War II that had been made on consumption function did not come to be true. What is more, estimates of savings in the United States made by S. Kuznets who constructed new aggregate data on consumption and income dating back to 1869 indicated that the ratio of consumption to income was stable in spite of the considerable income increase over the period. The theory of consumption function was also not clear about the cause of the differences between households from various socio-economic categories. These puzzles stimulated economists to elaborate more complex hypotheses in order to incorporate both the dynamic and the static parts in the framework of one model.

In my review of theoretical and empirical studies of saving behaviour I am going to fix my attention on the main ideas of the mainstream economic theories of savings and their empirical validations. The aim is to find out to what extent the finding that the majority of households in Russia deviate from the predictions of Permanent Income and Life-cycle models is similar for the empirical findings in other countries. If such similarity exists, I wonder if the same theoretical ideas which are used to explain these deviations can be used in case of Russia.

5. Models of forward-looking behaviour

The main assumption of Permanent Income and Life-cycle models is to consider individuals as forward looking agents which are able to base their consumption on a long term view of income (lifetime or timeless horizon). Individuals and households are supposed to be concerned about long-term

consumption opportunities and therefore make their saving and consumption decisions taking into account expectations about the amount of income in the future. According to these models, individuals view savings as a way to «smooth» consumption in the presence of income fluctuations that is why consumption is determined by anticipated lifetime resources rather than current earnings. Saving over short periods of time (e.g., a month or a year) is expected to reflect departures of current income from average lifetime resources. In other words, according to these theories, when current income falls below average expected lifetime income, saving decreases, and individuals and households may even borrow to finance consumption. When current income exceeds average expected lifetime resources, individuals and households save.

While considering Friedman's theory and the evidence for it one has to keep in mind that the type of tests which Friedman had done were actually based on another definition of consumption that it was used for formulating the theory. The theory was based not on the conventional definition of consumption (which relate consumption to actual expenses on food, services and durables), but on the concept of actual consumption of goods and services. In this approach money that was spent on durables could not be considered as consumption since durables are going to be used beyond the current period when they were actually bought. That is why in the proper concept of consumption only purchases of non-durables and the depreciation of the sock of durables should be included, whereas most of the tests made by Friedman himself and other economists used conventional definition of consumption. The basic reason for doing this was the lack of data on an appropriate definition of consumption. It is possible to measure food consumption but very difficult to get data on the depreciation of household's stock of durables. That is why the conventional definition of consumption is used assuming that unobserved depreciation is approximately equal to new purchases.

This hypothesis had been constantly tested since the time when it was postulated using the data collected all over the world. Tests had been done using macro data in 1970s and 1980s showed that the propensity to consume out of the permanent part of income was larger than the propensity to consume out of the transitory fraction that supported the idea of smoothing behaviour.

Nevertheless there were a number of problems with testing the Permanent Income Hypothesis. As Mayer pointed out, a number of methodological difficulties existed. The most important one was connected with the problem of measuring permanent income which cannot be observed directly. «...The only way to test this hypothesis is to compare different permanent incomes either at one moment of time (cross-section tests) or over time (time series tests). Such comparisons assume that one can isolate the effects of differences in permanent income. But many other factors, apart from permanent income differences, can affect consumption; and if some of these factors are correlated with permanent income then there is the danger of obtaining a spurious correlation between permanent income and the propensity to consume... If differences in the tastes for savings are correlated with permanent income, then the usual type of regression we run in economics may attribute to differences in permanent income what is really the effect of differences in tastes» (Mayer, 1972, p. 10). One had to think about convincing instruments to approximate to it. The same kind of argument one can find in Deaton (1997). He seemed to be doubtful that usual instruments such as assets, or lagged income, or human capital, could predict permanent income and not have an influence on consumption directly. For example, education itself may make people think more about future and therefore encourage savings. As a result instead of revealing the true influence of income, we may get the actual impact of education hidden under the sophisticated cover of permanent income approximation.

In making his argument Mayer resorts to the sociological evidence that different income classes do have different tastes for savings. «As Pierre Martineau has remarked: It seems that many economists overlook the possibility of any psychological differences between individuals resulting from different class memberships. It is assumed that a rich man is a simply a poor man with more money and that, given the same income, the poor man would behave exactly like the rich man. The Chicago Tribune studies crystallized a wealth of evidence from other sources that this is just not so, and that the Lower-Status person is profoundly different in his mode of thinking and his way of handling the world from the Middle-Class individual....Lower-Status people typically explain why one should save — why the act of saving is important. On the other hand, middle class people do not, as if saving is an end-in-itself, the merits of which are obvious and need not be justified» (cited in Mayer, 1972).

Another difficulty, which was revealed by Angus Deaton arises from the fact that it is not easy to distinguish true transitory income from the measurement error. Estimation of the model instrumented by assets or human capital could be not only as an evidence of people's smoothing behaviour, but also as a result of measurement error in current income. This ambiguity was initially implied in the model, because «the transitory component includes also chance errors of measurement; unfortunately, there is in general no way to separate these factors from the transitory component as viewed by the consumer unit» (Friedman, 1957, p. 21—22).

The difficulties discussed so far bring the problem of non-economic factors of saving behaviour up for discussion once again. One the one hand, Friedman argued that different non-economic factors may be washed away and be substituted with income only, on the other — he was one of those who introduced the idea that saving cannot be explained by current income alone. He considered education (human capital) to be one of the main determinants of consumption since it, taken together with non-human wealth, approximates the overall amount of resources available for an individual. However, the role of education could be presented in a different way. If there is a significant effect of social background on educational attainment, education is not an exogenous determinant for occupational attainment and income, but rather a device for reproduction of the existing social stratification which let individuals expect what amount of income they are going to earn throughout of their lives. However it is not only education but also patterns of behaviour that different status groups accumulate in the process of socialisation and later use for their reproduction. The same effect is produced if one's overall economic resources depend not on his or her personal experience and skills but the access to the resources of a social group s/he belongs to or there is any kind of gender, national or race discrimination on the labour market, unprivileged groups of people will suffer from earnings inequality in spite of growing level of their education. So, if there is any kind of discrimination or status closure, the influence of education on individual earnings and economic performance will be overestimated.

If that is true one can argue for bringing back the non-economic considerations to the analysis of saving behaviour but in a way that does not challenge the basic assumption of Friedman's theory about the ability of an individual to look forward and plan his/her consumption according to his/her overall wealth. Nevertheless there may be different strategies of implementing consumption smoothing. Friedman himself did not insist on that there was the only one implication of rational behaviour, which is to consume the permanent income and to save the transitory one, but he presented it as one of possible simplifications which are not inconsistent with it and should be tested against the data (Friedman, 1957, p. 13).

In Russia, we have a situation when income and education are not highly correlated since there is a huge proportion of educated people which after reforms lost the possibility to employ their skills and experience on the market. That means that it is possible to find out if education other things being equal could cause an influence on saving attitudes and practices. For example, people with different educational level and similar income levels may have different attitudes to savings, debts and risks, etc. Although we need to make an assumption that education even being outdated can be measured by educational attainment.

The recent facts tell also that there was a steady decline in the household saving rates in the most of developed market economies. In the presence of this tendency saving behaviour has become attributed to the wealthiest households. But it was the middle income strata whose forward-looking saving and consumption behaviour was consistent with optimisation framework. As a result deviations from smoothing behaviour to more diversely motivated strategies may have become more frequent taking into account this shift.

The considerations discussed so far may give one the possibility to conclude that within the body of a theory the main emphasis was made on the idea of forward-looking financial behaviour of individuals. Finding out different strategies of consumption smoothing can validate the basic assumption of the Permanent Income Hypothesis that consumption of rational individuals depends on the discounted human and financial wealth and challenge the assumption that wealth is limited to education and financial assets only.

In Life-Cycle Hypothesis the same logic, as in PIH, is applied to the understanding of the relationship between income and savings. A really important issue is that current consumption of an individual does not depend on his/her current income but is a result of a plan to maximise his/her utility function subject to resources available to him/her over the whole life span. If permanent income is calculated as an average income over the lifetime of a family, Friedman's hypothesis coincides with the life-cycle model (LCH) Franco Modigliani, Richard Brumberg, and Albert Ando in a series of articles in the 1950s and 1960s. Because measured income is expected to be less than the permanent in the initial and final periods of working life, and greater in the middle years, there is no wonder that saving rate is lower (it can become even negative) for the terminal compared to the middle phases. Both models were considered to be useful economic conventions, but because Friedman's model could not be easily tested against the data and the LCH had more detailed econometric implications[4] the latter became fundamental basis for discourse, as F.Modigliani himself pointed out later.

Just as in Friedman's hypothesis, Modigliani tries to base his macro model of saving behaviour on the basis of neo-classical utility analysis proposing to replace Keynes's fundamental psychological law with the idea of forward-looking behaviour. Households are assumed to take into account income far

_____
[4] Also LCH had no restrictions on the correlation between transitory income and consumption to be equal to zero which had to be very much criticised in PIH.

beyond that period when they make their saving and consumption decisions. As a result, contrary to Keynes's absolute income hypothesis, households go on consuming a constant fraction of their life-cycle income. The deviations from that mainstream tendency can be explained by short-term and long-terms variations in income around the 'basic earning capacity of the household'.

The main difference between these two theories lies in the considerations about time horizon. In the Life Cycle Model the time horizon is limited by the life-cycle span whereas I the permanent income hypothesis the horizon is infinite. Consumption smoothing in Life-Cycle Hypothesis takes place in the similar to the permanent income model way: individuals base their consumption on what they consider their «life-cycle» income. In doing this, they attempt to maintain a fairly constant standard of living even though their incomes vary on the different stages of their life cycles. Typically individuals accumulate resources during the periods of higher earnings (mainly during the best years of their working span) for later expenditure, mainly for the retirement. According to the model, saving should be positive for households in their matured working age and negative for the young and the retired ones, so that if I plot saving against age in a cross section, saving-age profile should be hump-shaped.

In more advanced versions of LCH the age after which dissaving may be observed is affected by life uncertainty, and precautionary saving, but they do not undermine the main implication of the theory that individual wealth must eventually fall with age. Thus, the stylised facts of U-shaped saving-age cross-section profile are considered to be a strong contradiction to the theory if we assume that life-cycle resources and preferences are stable across cohorts.

Another version of explanation, which is similar to LCH/PIH model, can be found in the relative income hypothesis, developed by Duesenberry a few years prior to Friedman's book. In the literature, the relative income hypothesis is considered to be an economic model by psychologists and sociologists and economists associated it with the sociological approach. This hypothesis has many sociological insights. By trying to incorporate them into the body of economic analysis the author violated the basic economic assumption about the independence of individual preferences. As a result he produced original theory which became famous, but not followed.

Duesenberry as well as Friedman and Modigliani thought that Keynsian consumption function is misspecified because it was based on current income alone. Whereas the empirical analysis of budget studies indicated that there was clear sign of the importance of income dynamics: households with budget deficits are more likely to be found in low-income group. But most of them

happened to appear there temporally as a matter of fact of cyclical dynamics of the economy. He interpreted the deficit to be an adjustment of consumption to the long-run household income: when current income is scanty households maintain their current consumption by dissaving.

To explain the mechanism of smoothing Duesenberry pointed out at the lack of evidence for standard utility theory and its key assumption of the independence of individual preferences. Backing of his argument by referring to works of Marshal, Veblen and Knight he stated that it is not quite right to ignore the actual interdependence of preferences and the fact that people's consumption and saving patterns are socially or culturally determined (Duesenberry, 1949, p. 98). Duesenberry criticised preference theory and marginal utility theory which present a consumer making his choice about the quantity of goods and services considering a menu of all available items and their prices as an extremely doubtful assumption. A more realistic theory, in Duesenberry's opinion, had to assume that «the mechanism which connects consumption decisions is not that of rational planning but of learning and habit formation» (Ibid, p. 24). Individual preferences correlate significantly with age, region and social class groupings, but even for the random sample of the whole population correlation is still strong for the most basic necessities and becomes weaker for aesthetic and recreational activities.

The assumption of the preference's interdependence means that influences from the social family setting could have a separate effect on consumption and savings even in the absence of any changes in income. If neo-classical economists presuppose that people maximise utility and minimise costs in the presence of stable preferences *by nature*, Duesenberry thinks that it has been happening not by nature, but rather *by culture*. The main difference lies in the assumption that because of 'the demonstration effect' «consumer's utility index varies with the ratio of his consumption to a weighted average of other people's consumption» (Ibid, p. 48). Contrast to the neo-classical economists who considered it to be the function of one's consumption and asset holdings.

However Duesenberry's hypothesis has an evident sociological elements I am not going to use it for the analysis of consumption and saving behaviour of Russian households. On the contrary, my arguments are similar to those of neoclassical economic approach when the emphasis is made on the differences of opportunities rather than differences in tastes and preferences. Contribution of sociology in my opinion can become sounder if it will be linked to enrichment of the characterisation of opportunities that people have rather than focusing on the imitative nature of households' consumption patterns

and their dependence on the consumption patterns in people's reference groups. In spite of the fact that learning through imitation and habit formation seem to be intuitively appropriate for explanations of households' financial behaviour since they can explain everything in fact they explain very little. To unfold why consumption patterns change, Duesenberry had to resort to claiming that goods are continuously changing, people have a desire for higher living standards and many other similar statements borrowed from psychoanalytical and sociological literature which make his theory more speculative rather than operational.

6. Empirical evidence on excessive sensitivity of consumption to current income

The PIH/LCH model has been continuously testing since it was elaborated. Most of the tests seem to achieve fairly accurate empirical results showing that the data verify the idea of smoothing out fluctuations in income with the help of savings. At the same time, some of the tests reach conflicting conclusions and suggest that actual consumption seems to respond more strongly to changes in current income than these theories of consumption would predict. The critical evaluation of different kinds of tests on the Permanent Income Hypothesis that had been done in the late 1950s and 1960s one may find in Mayer (1972). The author concluded that some of the tests failed to validate the theory, some of them were consistent with it, but none of them were consistent *only* with permanent income hypothesis and reject other consumption theories.

As far as testing the LCH/PIH on aggregate data was problematic until the end of the 1970s when the statistical problems of working with non-stationary time-series data on income and consumption were partially solved in the influential paper of Hall (1978). He introduced a model adopting rational expectations approach and showed that «no variable apart from current consumption should be of any value in predicting future consumption» (Hall, 1978, p. 971). Instead of estimation of consumption function by elimination of the unobservable marginal utility of wealth he considered equilibrium relationships that can be used to estimate structural parameters and tested some of the implications of the model. As Attanasio pointed out in the chapter on consumption in Handbook of Macroeconomics: «The elimination of the unobservable marginal utility of wealth is similar to the estimation by quasi differencing of fixed effects in econometrics. The problem here is that the 'fixed effect' that is differenced out is one of great importance» (Attanasio, 1999, p. 768). The Random-Walk

Hypothesis is based on the assumption of rational expectations, that people use all available information to make optimal forecasts about the future. That means that at any moment consumption decisions are based on people's current expectations of their life-cycle resources and the expected consumption in the next period is normally equal to that in the current period. If that is true, then changes in consumption over time can appear only because people receive news that make them revise their expectations. In other words, changes in consumption reflect «bolts from the blue» in the life-cycle incomes. That is why if the LCH/PIH hypothesis is true consumption should follow a random walk and therefore should be unpredictable. The simplest testable implication of the pure life cycle-permanent income hypothesis is that only the first lagged value of consumption helps predict current consumption. Hall tested the model on aggregate data and found that lagged income was not significant.

Later on many studies used the 'random walk' approach and tested the model. They have found more evidence against the model since other variables can help to predict variations in consumption. Hall himself finally rejected the model by finding that lagged stock-market values predicted consumption change. In other studies it was found that a small but significant part of the variation in consumption changes appears to be predictable by information in current and lagged income. The sensitivity of current consumption to current income controlled by lagged income has been termed the «excess sensitivity» puzzle. It states that consumption responds even to predictable changes in income, which in the permanent income theoretical framework should be already included into lagged consumption. I would like to focus in this paper on this puzzle since the empirical evidence which has been found in Russia follows formula of excess sensitivity of consumption to current income.

For example, Flavin (1981) noted that predictable changes in labour income contrary to the PIH produce changes in consumption. She developed a structural econometric model of consumption and showed that the random walk hypothesis proposed by Hall can be considered to be a test based on the reduced form of this structural model. Using this structural version of Hall's model she found that consumption was more sensitive to income changes than predicted by the LCH/PIH theory.

Blinder and Deaton (1985) reproduced Flavin's finding that the change in consumption was predictable from past income. They found consumption to be too sensitive to the pre-announced changes in taxes in the later phases of the Reagan tax cuts. In their empirical work contrary to the implications of LCH/PIH theory lagged income and the forecast of current income based on past lagged information were both significant.

Notable discrepancies between the model's predictions and aggregate data continued to appear in 1990s. Campbell and Mankiw (1990) tested Hall's assumption against the excess sensitivity of consumption. They proposed a specification of an Euler equation that gave them the possibility to estimate the fraction of consumers behaving according to PIH/LCH model contrasted to the rest of them which followed the 'rule-of-thumb' strategy spending all their current income for current consumption. The estimated proportion was lying between 0.4 and 0.5. Consumption is turned to be much more sensible to actual income than what the theory suggests. Campbell and Mankiw suggested that that happens because there is certain fraction of consumers that are liquidity constrained. Most of the sensitivity to actual income comes from the data collected in recession. Since during the periods of economic recessions there are restrictions on borrowing people start to be very sensible to actual income.

When microeconomic data became available a number of studies used them in order to find out if «the theory fares better there» (Deaton, 1992, p. 136). One of the most cited paper in which the micro data was used is a study of food expenditure in the PSID by Hall and Mishkin (1982). Approaching the problem in the same manner as Flavin they find excess sensitivity by regressing individual consumption growth on lagged income growth. Parker (1999) using the change in after-tax income due to the gap on earnings subject to the social security tax. Souleles (1999) examined the response of consumption to income tax refunds, and found that even when income is expected to change within the year, expenditure is excessively sensitive to the timing of the income change.

The main body of recent arguments for and against LCH is reviewed in Deaton (1992). Firstly, he states that there is a lack of evidence for dishoarding during retirement. The USA data demonstrate that people track their consumption closer to income than it may happen in the case of the life-cycle optimisation. As a result the most popular tendency in families was to increase savings gradually within the life span, but theoretical grounds for this behaviour are very unclear. What was also contending that the age-income profiles were not similar for the different occupational and educational groupings of families.

Secondly, LCH seems to overstate the long-term motivations of households to save money for the retirement and dissave during it without institutionalised forms of private and national pension schemes. Many households do not accumulate wealth for the retirement in financial assets.

Finally, the life-cycle hypothesis neglected to take uncertainty into account. But if the uncertainty is widespread it beats out the intuition of the model and it distorts the results, because in that case people experienced the negative shocks would prefer to keep their assets preserved and decrease consumption instead. Modigliani himself knew about this weakness of his hypothesis, but he assumed that introducing uncertainty could be postponed until the moment when the full exploration of the model's implications under assumption of certainty would be given.

7. Explanations for «excess sensitivity» of consumption to current income

The puzzling question was why consumption of forward-looking consumers is sensitive to current income and how one can make these results to be consistent with model? In the literature several explanations for this «excess sensitivity» have been put forward. Firstly, it may result from capital markets imperfections which prevent rational agents from following their desired consumption path as it was done by Flavin (1985) and Campbell and Mankiw (1990). Imperfections in financial markets preclude people from borrowing when their current income can not provide for their permanent consumption. When income rises consumption follows that rise and the excess sensitivity is observed.

Secondly, excess sensitivity may be a result of myopic behaviour of households which are not able to form rational expectations and to base their decisions on intertemporal utility maximisation. To explain excess sensitivity Flavin (1985) and Romer (2001) referred to myopic behaviour from a significant part of the consumers.

Thirdly, less common interpretation refers to uncertain consumers with a precautionary savings motive. Carroll (1994) shows that US consumption depends on current income rather than lifetime income. He also shows that uncertainty about future income is an important determinant of private consumption. He links these findings with «buffer stock» model of consumption (Carroll, 1997; Carroll & Samwick, 1997; Deaton, 1991) where precautionary motives reduce the willingness of prudent consumers to consume out of uncertain future income. These consumers keep a small stock of assets as an insurance against future income fluctuations while their consumption tracks disposable income quite closely. The pattern of asset accumulation predicted by buffer-stock models is very different than the hump-shape predicted by the LCH. Wealth is expected to remain fairly constant (assuming that households have accumulated and can maintain their optimal buffer stocks) until about age 50 when households begin saving for retirement (Carroll and Samwick, 1997).

Fourthly, the lack of the dissaving behaviour, as it was suggested in Mirer (1979), can be link to the correlation between the level of material well-being

and life expectancy. If there is a positive correlation between the life span and the wealth of people, it may be the case that savings in the old age are not negative just because those people who had survived are wealthy enough not to dissave. Other explanations for observed excess sensitivity to income relate to imperfect information (Goodfriend, 1992; Pischke, 1995) and misspecification of the estimated consumption function (Campbell and Mankiw, 1990).

Although the revealed evidence shows the excessive sensitivity of consumption to income it does not undermine the validity of the permanent income and the life-cycle hypotheses. Martin Browning and Thomas F. Crossley (2001) went strong on PIH/LCH by examining the empirical evidence[5] on smoothing at frequencies from within the year up to across a lifetime. They found that life-cycle models have more empirical successes than failures in Western economies and that it is possible to explain puzzling 'tracking' of consumption within this theoretical framework. The coherence of life-cycle models in their opinion imposes an important discipline when incorporating new features into models.

8. Studies on consumption and saving behaviour in developing and transition countries

In Alderman and Paxson (1994) and Deaton (1997) literature on consumption smoothing behaviour is discussed in the relation to developing countries. In developing countries Wolpin (1982), Paxson (1992); Deaton (1992) found supporting evidence for PIH when even without access to formal insurance and credit markets, such households have generally been able to smooth their expenditures in the face of large and frequent income shocks (e.g., Deaton, 1990; Paxson, 1992; Townsend, 1995).

In his 1997 book Deaton discusses the empirical evidences obtained in testing LCH in the developing countries. He writes that the data show the lack of evidence for LCH 'hump saving', it was more likely to find that consumption was much closed to income and savings occurred after age of 40. Often it can have been the case that explanation was linked to the low life expectancy in these countries and the habit of living in extended families. Old people usually do not live alone because customary children take care about their old parents. Deaton writes that in the poorest or developing countries, «where the family size is large, and life expectancy relatively low, the fraction of old people is small and very few of them live alone. When the

---

[5] U.K. Family Expenditure Survey data.

16

elderly live with their children, they can be provided for directly and personally; there is no need for the accumulation of marketable assets that is done in developed economies through anonymous and impersonal financial markets» (Deaton, 1997, p. 338). In such circumstances, there is no need in saving money for retirement.

LCH needs additional considerations about the institutional frameworks which provides the possibilities for households to exhibit smoothing behaviour. Long-term life cycle saving strategies are supported by such institutions as national and private pension schemes, as well as family compositions that requires impersonal schemes of retirement provision. Saving for the retirement is sensitive to the lack of trust to such institutions as banks and pension funds. In that case saving may take the form of non-financial asset accumulation or intergenerational private transfers.

In a study on Russian data Gregory, Mokhtari & Schrettl (1999) found paradoxical U-shaped saving-age relationship (Figure 1). This finding was supported by Denizer, Wolf and Ying (1998) who revealed the pattern of unusually high savings of elderly in Bulgaria, Hungary and Poland. Steven Stillman (2001) reported that most evidence indicates that the traditional Life Cycle/Permanent Income Hypothesis model is firmly rejected as describing the behavior of Russian households. Changes in household savings are negatively related to exogenous income shocks, with this relationship strongest for low wealth households. That is why in his opinion only models of consumption which include precautionary savings motives can explain why poorer households both reduce their consumption and increase their savings in response to an exogenous decline in income.

Skoufias (2003) found that consumption is only partially protected from idiosyncratic shocks to income with food consumption being better protected than non-food consumption expenditures. This suggests that adjustments in non-food expenditures may be an important component of the risk management tools of Russian households. The empirical analysis in Skoufias (2004) based on monthly data from a panel of households in Bulgaria in 1994 revealed that consumption is protected only partially from idiosyncratic fluctuations in income. The main finding was that households smooth food consumption by adjusting their non-food expenditures and by borrowing through formal and informal credit markets. The extent of consumption smoothing varies across regions and across household characteristics. Food consumption also appears to be less protected from changes in food prices than it is from changes in household income.

For Russian case Gregory, Mokhtari & Schrettl (1999) suggested to explain U-shaped savings-age profile by the fact of dramatic deterioration of life

17

expectancies of middle-aged Russians. Middle-aged men are not expected to live to a retirement age. It is doubtful that mortality and life expectancy statistics are well known by ordinary citizens, and even if they were known not many agents would take this information personally. Furthermore, life expectancy statistics are much better for women, but there is no significant gender effect on individual saving behaviour.

The ownership of the housing stock as a result of free privatization was described as an alternative explanation for the high saving rates of the elderly, which enable them to save more. That is true: the older the head of the household is the higher the probability that s/he lives in his/her own privatized flat and the bigger the size of the floor space per head are. But at the same time money incomes in the households with older breadwinners are noticeably lower than those in the younger families. Accompanied with the fact that money savings which had been accumulated by the elderly during their lives were dramatically depreciated in 1992 it is unclear how the ownership of the housing stock enable them to save more.

Denizer, Wolf and Ying (1998) supposed that unusually high savings of elderly may be explained by the precautionary motive which is more widespread among the elderly, especially among those who remember hard post-war times. That is true; the older generations also consider savings as a virtue while the younger — as a means for their goals.

Unusually high saving rates among the young Russians are suggested to be the result of the higher share of family transfers in their incomes. Foley M., Pyle W. (2000) revealed on the basis of the RLMS data set that the young Russians had the higher share of family transfers in their incomes which could be related to the higher savings of younger people. It is not clear whether there may be a causal relationship between these two variables.

So, there are debates in the literature about the validity of PIH/LCH as a theoretical framework within which one can explain consumption and saving behaviour of households. I would like to take the Russian case to consider different explanations for this puzzling behaviour.

9. Data sources

9.1. Russian Longitudinal Monitoring Survey (RLMS)

RLMS provides detailed information on characteristics, expenditures, the flows of savings, and incomes on all members of participating households.

RLMS is a household-based survey which has been collecting information on an annual basis since 1992. But due to the changes in the sample which took place in 1994 I use the years spanning the period from 1994 until 2001 throughout which the information collected has been broadly consistent. Information on approximately 10 000 individuals living in 4000 households was recorded in 1994, 1995, 1996, 1998, 2000, 2001, 2002.

The individual questionnaire was administered to every person living in the household with the exception of some individuals, such as very young children and elderly people, who was not interviewed. For the household interview, a single member of the household was asked questions that pertained to the entire family.

The respondent was usually the oldest living woman in the home since she was available to be interviewed during the daytime. Information on incomes and expenditures is collected for a 30-days period.

The data could be used both as a longitudinal survey and as a set of cross-sections. The RLMS is a longitudinal study of the population of dwelling units. The original sampling plan for Rounds V-VII did not call for households to be followed if they moved from the Round V sample dwelling unit. Likewise, individual household members who moved away were not to be followed. At each round, the RLMS interview was completed with the household and its members in the original sample dwelling unit. Consequently, the RLMS is not a true panel design, although Round VII departed from the original protocol and followed some households and individuals who moved. Rounds V—VII are designed to provide a repeated cross-section sampling. Barring the construction of major new housing structures, renewed contact with a fixed national probability sample of dwelling units provides high coverage cross-sectional representation.

For my purposes I use either cross-sections which are representative for the whole Russia, or a panel subsample of individuals who were surveyed in all waves and live alone or with a spouse, who have or do not have children under 18. I use individual and household level data.

9.2. Monitoring survey of economic and social changes (VCIOM)

Unfortunately, RLMS does not collect data on stocks of wealth, forms of assets, saving motives, index of saving sentiment and the like. That is why I am going to use another data set where this information is collected.

The project of the Monitoring survey of economic and social changes was launched in the spring of 1993 under the supervision of T.I. Zaslavskaya.

The aim of the monitoring program is to keep track of the economic, social and political attitudes, and to work with different indices. The monitoring is conducted in a number of projects which consist of small subsections. As a rule, two-three (or more) measurements a year are taken, which makes it possible to observe the dynamics of all the indices. The main part of the questions of each project is repeated from wave to wave.

The Monitoring survey is conducted once in two months on an all-Russian sample of urban and rural population: 2400 persons aged 16+ are interviewed on a nationally representative multistage stratified sample.

9.3. Face-to-face open-ended focused interviews[6]

Research was conducted in July—August, 2004 when 33 Muscovites from the upper income group were interviewed. The informants were asked to volunteer information about their portfolio practices and attitudes towards different forms of savings.

Data were gathered through a snowball sample. I decided to use a snowball sample for several reasons. First, the topic about savings is a very sensitive one, people are not eager to talk about these issues with somebody who was not recommended to them as a reliable person. This recommendation should be given by those whom they trust. Especially in the case when one needs to study the upper income group. Second, snowballs techniques are more suitable for studying units with desired characteristics which are not obvious. In my case I was interested not only in selecting people whose income was high enough to provide possibilities to save but also in those individuals which had been financially active for the last several years. This information was given to us through recommendations. And finally, my research goal in gathering qualitative data was not about drawing any empirical generalisations about the distributions of social, demographic, economic or psychological characteristics of this group but revealing their motivations for savings, interpretations of the situation on Russian financial market, understanding of their attitudes towards risk, profitability, and liquidity of their savings.

I obtained initial 7 respondents for this study through personal contacts in different disjoint social networks in order to be sure that my sample is enough diverse to reveal as many different points of view as possible. The strings which followed after these 7 initial respondents were 3-5 person and there were 5 people more which were not connected among themselves.

[6] Data were collected within financial and organizational framework provided by research centre ZIRCON and in cooperation with I.Zadorin.

Two thirds of the sample are males, the middle age of respondents in a sample is about 40 years, all of them have high education. The focused individual interviews were carried out with:
• bank depositors which accounts are over 150 000 rubles (approximately 2 800 pounds);
• shareholders of unit funds;
• stock market small-sized private investors;
• users of life insurance schemes;
• benefited from the increase of its market value; owners of objects of Moscow real estate which lease them out or
• co-investors of different business projects.

People who have possibility to invest or deposit 150000 rubles or over but do not want to do that and have never done it before are not selected into the sample because I am interested in interviewing people which have financial experience. In relation to professional status respondents in a sample represent:
• employees of real estate and investment companies, teachers and managers of economic departments of universities,
• owners of small (up to 30 employees) private enterprises in retail and services,
• top managers of medium and large private companies.

Some respondents live and work in Moscow, but have no Moscow permanent registration.

10. Types of saving strategies of households

As one has learnt from the literature the excessive sensitivity of consumption is a puzzling fact of transition economies. The basic idea which I am going to use for the explanation is that rational strategy of smoothing consumption with the help of financial savings could become a popular strategy of households in a situation of low uncertainty of future personal incomes and high level of trust in financial institutions.

If trust in financial institutions is low households smooth their consumption with the help of non-financial forms of savings, buying durables or making in-kind provisions for the future. This kind of strategies of smoothing consumption is popular in the developing countries with seasonal agricultural production.

If uncertainty of future incomes is high and there is little trust in financial institutions one might find more appropriate not to save but to «invest» time or money into developing of her or his ability to earn money in difficult times.

For example, pensioners may think about working strategies after retirement which may make them better off than money saving for the retirement in banks or shares which are subject to distortion in unstable economies. Unemployed teacher could earn some money by working as an unofficial taxi driver, or tennis coach that means employing his or her skills which have been developed through consumption practices. The more skills a person has the higher is her/his ability to make the ends meet in hard times, especially in the situations when there is the lack of public safety nets.

The skills which may help people to overcome negative income shock may not demand special «investment» strategies of acquiring additional skills or education which may be «stockpiled» for the rainy days. Normally people can not get an appropriate level of expertise by education itself. They need practicing and employing their skills to develop the ability to use them. That is why the reserve they have in my opinion is accumulated in their consumption patterns rather than educational degrees. Activities in which people used to engage as a part of their everyday consumption can increase their earning capacity in hard times

Using this approach I propose a number of explanations of the excessive sensitivity of consumption to current income in Russia.

The first group of hypotheses states that PIH/LCH work, but in a way that reflects specific features of Russia transition. Russians are rational in the same way as Western Europeans and Americans but in the face of market imperfections they temporally deviate from the «proper» model behaviour. When those imperfections are over, consumption patterns of Russian households (including consumption smoothing) will return to the standard path observed in developed market economies.

There are a number of imperfections of transition economies which could be mentioned in this respect:
- Low personal incomes
- Liquidity constraints
- The lack of trust to financial institutions and shortage of saving and investment tools
- Cohort effects

We may use these imperfections to specify the reasons for why the data on Russian households do not match the LCH/PIH model.

1. Russians consider their current incomes to be far too low for saving. They would rather borrow than save but in the absence of the possibilities to borrow they live within their means.

The level of incomes in Russia is too low to provide the possibility to save. People live in the hope of forthcoming economic well-being. That is why every time when incomes rise people expect further growth of incomes and instead of savings they increase their consumption. Liquidity constraints make borrowing impossible for them.

2. Russians smooth their consumption by using non-financial forms of savings.

In the absence of the possibility to borrow on the financial markets and to find the appropriate financial instruments for savings households tend to use non-financial forms of savings to provide the appropriate level of consumption during the periods of negative income shocks. LCH is valid, but one needs to take into account non-financial forms of savings.

3. Russians smooth their consumption over their life cycles but due to the huge cohort effect one cannot reveal it through savings and incomes age profiles based on cross-section studies.

Saving-age profiles which are based on cross-sections are not appropriate because cohorts differ in their incomes and propensities. If individuals born in different years are different in their resources or preferences, hump-shaped saving-age relationship will not be observed in a cross section.

The second group of hypotheses is based on the idea that PIH/LCH does not work in Russia in a way as it works in the developed markets not because of the «backwardness» of Russian economy and the existence of market imperfections, but on the contrary it reflects the general tendencies in saving behaviour all over the world in the amplified form. In the presence of uncertainty which in the modern world refers not to the life trajectories of individuals only, but includes systematic risks it may become less reasonable to save money using external (financial and non-financial) instruments of smoothing consumption like bank deposits or securities which are subject to damage. More secure strategy is to invest into developing personal abilities to earn money in difficult economic circumstances. For example, in a situation of 1991 when economy entered the period of systematic crisis it turned out that skills which people had developed through their consumption patterns might help them to find possibilities to maintain their consumption in spite of the devaluation of their savings, education and professional skills.

We may specify two reasons for why the data on Russian households do not match the LCH/PIH model in the following way:

1. It is less reasonable to smooth consumption with the help of savings in the presence of high instability of financial markets. Russians who are more

flexible in their earnings are able to smooth their consumption through their life cycles with the help of earnings, not savings

The wide spread of informal economy give Russians the possibility to earn more when money is needed. For example, driving skills, mastery of cooking, artistic talent may raise one's chances to find a job on the market in case of unemployment especially when one's highly specialized professional skills are depreciated. Further, in life-cycle perspective pensioners may compensate the loss of incomes by keeping on working after retirement or through sharing incomes within the household.

2. It is possible to smooth consumption by substitution market goods by non-market (home-made) ones.

In the presence of uncertainty on markets households may prefer to provide their basic consumption with the help of domestically produced goods which are difficult to estimate in money terms.

Finally, one might suspect that PIH/LCH does not work in Russia at all — there is no smoothing of consumption in any form.

In the presence of high uncertainty it is impossible for a household to estimate neither permanent level of incomes nor permanent level of consumption. That is why instead of smoothing consumption they track their consumption close to incomes, economizing when current incomes are low and expending on consumption when they are high. As a result, Russians are flexible in their consumption through their life cycles.

The empirical part of my paper is devoted to the assembling and evaluating the evidence and considering it against my theoretical assumptions as well as other plausible alternatives. The fist idea that one may think of while looking for explanations of puzzling data is that there is something wrong with the data. That is why before evaluating the evidence in the light of any theoretical framework it is necessary to find out whether it is appropriate to use the data of the Russian Longitudinal Monitoring Study for the analysis that I propose. To put it otherwise — I would like to know whether the lack of savings which had been revealed on the basis of this data reflects the behaviour of households and not the drawbacks of the methodology of data collecting.

11. Data considerations

There are at least two reasons why one may doubt the validity of this data and argue that the puzzling tendencies are artificially produced due to the specificity of data collecting process.

Firstly, RLMS collects information about one month flow of savings while it is more appropriate to test LCH/PIH by using yearly savings estimates. If savings are seasonal and the most of them are made in different times and not in October-December when RLMS collects data, saving are not properly recorded.

Secondly, savings may not be properly reported. Since a large amount of savings are made in cash the majority of households may not want to report about accumulated savings because of security reasons.

If any of these doubts is true one can conclude that it is impossible neither to reject nor to confirm PIH/LCH for Russian case on the basis of this data. In order to dispel the suspicion that RLMS data can not be used to test the validity of PIH/LCH the following considerations are brought into.

It is true that one-month flow of savings measured as a difference between income and consumption is not the best indicator for testing LCH. It is more appropriate to use yearly savings measured as a difference between the amount of assets in the beginning and in the end of the year. But if it is possible to show that September-December, the months when RLMS data had been collected are not very much different from the rest of the year one can assume that one month savings can reflect what happens within the year. According to the PIH/LCH model transitory income should be saved or dissaved regardless of whether it was measured on monthly or yearly basis.

The fact which should be taken into account is that in the two waves, the fifth (1994) and the eighth (1998), the surveys were scheduled slightly differently. In 1994(5) the most of interviews (65,7%) were taken in December and in 1998 (8) — in November (82,3%) (Table 1).

Indirect evidence that one cannot refer to the scant transitory income could be find in the comparison of levels of real incomes in macro statistics (Table 2 and Figure 2). I see considerable volatility of incomes in real terms which in theory has to be smoothed with the help of savings.

As one can also see from the GKS macro data these months (Table 3) can not be considered as atypical: savings in September-November are slightly lower than the average of the year, but one can not say that these months are exceptionally inhabited in respect of savings. That is why the lack of savers and savings could not be explained by the specificity of saving behaviour of households during these months.

The excessive sensitivity of consumption to incomes is not revealed when one uses macro level data. One can observe positive relationship between the level of real incomes and the rate of savings (r = 0,88) (Figure 3).

To estimate the robustness of relationship between incomes and savings I used Goskomstat monthly data on monthly per capita increase of real

incomes and monthly rate of consumption for 6 years (1998—2003). I found that my previous finding is confirmed: on the basis of 72 observations r = −0.75 (Figure 4). The negative sign appeared because I used the rate of consumption instead of the rate of savings.

As a result of these estimations one can be quite sure that macro statistics indicates that in the periods of higher incomes Russians put aside larger part of their current incomes and in the periods of low incomes they consume the higher part of them.

However, the validity of this macro level finding is questionable as much as the notion of private saving which is used in GKS macro statistics (Nikolaeno, 1998). The basic argument of those who doubt that savings are measured accurately in macro statistics refers to the fact that purchases of cash dollars constitutes the major part of private savings in GKS statistics. Since not all cash dollars are bought for the purpose of savings[7] and dollars which are sold back to banks are not taken into account macro savings are highly overestimated. Taking an increase of bank deposits as an indicator of savings reduces the relationship between incomes and savings to the almost trivial one (Figure 5).

As a result one can not say with conviction if the excessive sensitivity of consumption is not revealed in macro statistics. Using the official measures of incomes and savings no excessive sensitivity exists: the higher incomes — the higher share of «savings». But that is true only for «savings» in cash dollars which are partly not savings since they are made by tourists to provide their consumption abroad and small retailers which buy dollars to spend them abroad for buying goods. If one measures «savings» as an increase or decrease of bank deposits no correlation with incomes is found.

Another possibility to explain the excessive sensitivity of consumption to current income lies in the rigidity of people to reveal true information about their incomes and savings. Let me consider the argument if the lack of savings could be explained by not properly reporting of the amounts of savings. The following counter arguments for this kind of reasons could be brought forward:

The designers of RLMS chosen monthly flows of saving because they tried to avoid the problem of underreporting which can be even more significant when the respondents are asked about the amount of their wealth. Another trick which was made to reduce underreporting — respondents were asked about total amount of savings without concrete definition of their form in order to make them confident that no one will be able to trace their actual savings using this questionnaire information. Also one may expect people

_____

[7] Partly cash dollars will be spent abroad by tourists and shuttling salesmen.

hiding information about their positive savings but there is no ground for not volunteering information about their credits or debts repayments. And finally, one may rely on the fact that this is a panel study where the relationships between interviewers and respondents are more trustful than that one in cross-sectional surveys because these people meet each other on a regular basis.

That is why I am sure that the way people are asked about savings in RLMS rather encourages them to volunteer information than discourage.

There are no other regular all-Russian data sources which I can use to compare the level of flows of savings with. VCIOM (The All-Russian Public Opinion Research Center) and FOM (Public Opinion Foundation) collects data about stock of savings. Due to their findings there are also very few savers: during 1993—1999 only 17,2% of households have reported that they (their families) had stocks of savings (Figure 6). The lower numbers of savers can be explained by the fact that these surveys are cross-sections and people are asked about stocks of savings which are more sensitive as I have already mentioned. In a hypothetic case the propensity to save, if they were given a large sum of money, was also low: only 9,5% would save the whole sum or a part of it (Table 4).

How to explain the puzzle of a very high level of savings measured on the macro level and lack of savings and savers in micro surveys? There are two basic explanations in the literature. One was elaborated by Nikolaenko who explained that difference by the overestimating measures of savings in macro statistics. Another was introduced by Diskin and Rimashevskaya and their colleagues: the difference was explained as a result of invisibility of 'savers' (the richest households) for social surveys.

On the whole, from all evidence I can assume that savings in RLMS data set are measured more or less accurately and the lack of savings reported is not a result of data distortion but reflects the actual tendencies of households' behaviour in Russia. It is important to explain why behaviour of Russian households deviate from the outcomes which are predicted by PIH/LCH. There are two competing ways of interpretation for that: one can either think of limitations which make the behaviour seem to be different when in fact it is not, or reveal other forms of rationality which deviates from the standard approach.

12. Low incomes explanation

Let us take the hypothesis that Russians consider their *current incomes to be far too low for saving*. If that is true that means that they would rather borrow than save but in the absence of the possibilities to borrow they live within their means. People live in the hope of forthcoming economic well-being

considering their current incomes to be lower than permanent ones. That is why every time when incomes rise people expect further growth of incomes and instead of savings they increase their consumption. On a perfect financial market they would like to borrow but liquidity constraints make borrowing impossible for them.

In order to estimate whether this idea corresponds to the data I compare family incomes and family food expenditures. I split the sample into 3 groups: the first one consists of those families whose incomes were equal to or less than their food expenses, the second — whose food expenses were 50—99% of their incomes and in the last group there were families whose food expenses were less than 51% of incomes. I assumed that families from the second group were less likely to make savings or dissavings, while those from the first would like to dissave or borrow and those from the third — to save. During all the waves the share of households which were likely to save or dissave has varied over eight years being at the high in 2002 (60,1%) and going down in 1998 (47,7%).

The variation of the share of households which are likely to save or dissave can be explained by the variation of real per capita incomes. The lowest level of the per capita incomes occurs in 1998, the highest — in 2002 (Table 6), the correlation between the share of potentially active households and real incomes is positive (0,84).

My hypothesis that the lack of savers could be a result of low level of incomes is supported by observation of positive correlation between the level of per capita real incomes and the share of families which save. When incomes increase the share of savers rises. But no correlation has been found for the relationship between the level of incomes and the share of financially active households: the share of financially active individuals is quite stable (the yellow line) (Figure 7). That means that households do not make negative saving in hard times either voluntarily or are not able to dissave due to liquidity constraints.

Why does not financially active behaviour rise with real income increase? Having in mind the possibility of underreporting of savings one may assume that since positive savings are less frequently reported than negative, one may encounter underreporting of active financial behaviour in the form of positive savings. When incomes rise negative savings as a result of income shortage reduces. But because positive savings are underreported one may observe the stable or even falling rate of financial activity in the presence of higher potential for financial activity.

In the following estimation I selected only those individuals who participated in all RLMS survey waves and live in non-extended families. My assumption was based on the idea that regular participation can be attributed to the higher tolerance of these individuals to volunteer information about themselves. It turned out (Figure 8) that there is little difference between the results which I obtained using different samples. As a result one can not explain financial inactivity by real income dynamics in the course of time: the potential of financial activity rises with the rise of real income but the real activity does not.

Subjective data about an individual perception of a «normal level of income» has been collecting in RLMS since 1998. Respondents are asked directly about the amount of money per month which is considered for them to be adequate. I look at the difference between this subjectively satisfactory level of incomes and the current one (Table 7). Certainly, one can not use this data for estimating transitory incomes, but the trends of increasing share of individuals whose current income are lower than the adequate one for them and the falling ratio of current income to adequate one are remarkable. That means that in 2002 more people became able to estimate the satisfactory level of incomes and this level has become closer to their current incomes.

On the whole, the idea that the lack of savings, positive and negative, as well as savers in Russia can be explained by the low level of incomes has not been fully verified on the basis of RLMS data. Current incomes do give the possibilities for savings but people do not use them, probably because they do not have the appropriate financial tools for savings.

13. Consumption smoothing using non-financial forms of savings

The second hypothesis which states that Russians *smooth their consumption by using non-financial forms of savings* can help us to explain the excessive sensitivity of consumption to incomes in the presence of the possibilities to save (2).

In the absence of the possibility to borrow on the financial markets and to find the appropriate financial instruments for savings households tend to use non-financial forms of savings to provide the appropriate level of consumption during the periods of negative income shocks. LCH is valid, but one needs to take into account non-financial forms of savings.

Preliminary indicators that taking into account savings in such durable goods as real estate objects and home appliances could make better matching between real data and predictions of smoothing behaviour models. There is a significant negative correlation $(-0, 212)$[8] between total amount of monthly

---

[8] Correlation is significant at the 0.01 level (2-tailed).

savings and total amount of money spent on durables in the previous 3 months. If one takes into account money spent on durables it is possible to see that smoothing behaviour is now dominated. Those individuals whose incomes have declined are more likely to dissave and those whose incomes have risen — save.

Unfortunately, the amount of money spent on durables is measured differently from all other expenditures including savings. In RLMS respondents are asked to report about durables bought during the previous 3 months whereas all other expenditures are measured on monthly level. That is why one cannot use the information directly. But what I can do is to find out if smoothing behaviour could be found if I assume that Russian households under the circumstances of low level of incomes and the lack of saving tools on financial markets not smooth consumption in full scale. Food consumption is something that people tend to maintain in hard times postponing other need for the periods of higher incomes.

We found additional evidence for the fact that financial savings and durables have a specific life-cycle pattern. My hypothesis is that LCH provides an appropriate theoretical framework to think about saving behaviour of Russian households but one needs to take into account the specificity of the transition period when an incomes-age profile has a different shape: in the post-soviet Russia people reach the peak of their incomes in their 35s-40s because these are the best years in terms of combination of professional skills and physical health. Because these years are also the years of active nest-building activities savings are not driven by retirement motivation. People in their late 40s the age when retirement motivation has becoming important lack financial resources and still bear considerable family costs. In the absence of the conventional private savings tools for retirement makes the task of financial savings for retirement difficult. That is why private financial savings for retirement are scanty and could be found on the eve of retirement. But private savings are not the main source to maintain consumption. Retired people either continue working, or rely on the help of their children, or reduce costs of their current consumption.

14. Trust in financial institutions

The main purpose of collecting qualitative data was to reveal how people which do have possibilities to save and would like to save or invest money in the light of their experience estimate financial market and different financial tools under current conditions. How do they see the optimal portfolio of assets,

what kind of barriers do they experience, do they feel any necessity to change their usual saving and investment strategies, how do they collect information, which opinions do they consider, and what kind of criteria do they take into account when taking decisions about their savings.

Since I was interested in opinions of people which do have experience, money and wish to save, Muscovites which have not less that 150 000 rubles (3000 pounds) as spare cash or on their current account which they would like to save or to invest were selected into my sample. I was interested in the following characteristics of their financial behaviour:

1) financial experience in the last five years and the shape of their current portfolio in general;

2) knowledge of current situation on the financial market and the attitudes towards the available tools;

3) notions about Moscow real estate market and its perspectives, future progress of mortgage lending;

4) the main criteria of portfolio decision making;

5) recipes of investing which have been elaborated on the basis of personal financial experience;

6) notions of profitability, risk, and liquidity with respect to different financial tools;

7) sources of information which can be trusted;

8) propensity to invest money using novel financial instruments and the image of an ideal financial instrument.

Data were collected by individual focused interviews.

Since in the qualitative research the size of a sample do not give to the researcher the possibility to reveal and test statistical hypotheses of the relationships between different characteristic the attention is focused upon questioning people's motives towards savings, justifications of acceptable portfolio compositions and meanings which they attach to their actions. I assume that an individual acts accordingly to his or her interpretation of the situation that is why understanding of motives can help us explain actual behaviour. I was interested in the whole spectrum of interpretations which have been elaborated by experienced savers being unable to estimate the size of each segment due to the small number of cases.

The interview data suggests that at the present time from the point of view of my informants almost all financial instruments including cash rubles and cash dollars are subject to political risks of different kinds. High level of distrust to all commercial credit companies which attract savings of people result from the obscurity of their financial activities, ambiguity of state policies

towards them and the absence of functioning legislative protection against fraud. Almost all Russian private banks, not to mention investment funds, are considered to be under the risk of law enforcement investigation and the criteria which authorities use to launch them are rather political than juridical. Accompanied with the lack of legislative measures which can protect savings of small investors in the case of licence withdrawing or bankruptcy the risk of investigation makes people think of bank deposits as of rather speculative than saving transactions.

The only exceptions of this attitude towards banks are Sberbank and foreign banks which have recently opened their retail services in Moscow. People consider these banks not to fall under this risk. Sberbank as the biggest and the only state bank is very unlikely to be involved in money laundering activities and even if it were involved there is a small chance of law enforcement investigation against it. The same is true for the big well-known foreign banks. But high safety of these banks on the other hand turns out to result in their low profitability. If interest rates do not exceed the price rise savings do not make sense.

In the presence of low impersonal trust in financial institutions investments into the one's own business or business of his or her friends seems to be an alternative solution of a difficulty of savings for those who have this kind of possibility. If one has no friends in business or they do not need credits the second best decision is to spend money on consumption, improvements of the quality of life. Buying real estate objects are also safe and profitable and the real estate market forecasts seem to be positive. The drawbacks of this strategy are high entry barriers, especially in Moscow city, and low liquidity of investments since one cannot sell his or her real estate property in parts.

People associate risky financial investments with the lack of personal control over their money when they trust it to somebody they are not personally acquainted with. If they have to trust their money without personal control over it they look for liquidity — the possibility to withdraw money from the asset as soon as the alert appears. This is taken as a proxy for safety. Estimation of risk rises with the extension of depositing terms: the longer the period of depositing the higher the risk is likely to be.

When risk is high profitability of an asset should be high as well — one is to be paid by higher interest rates when s/he invests into a risky asset. If risk and profitability are linked together, that means that all instruments with high returns are considered to be risky. That is why mutual funds are reputed to be more risky than banks even if they have better financial history than banks do. The estimation of risks is also connected with the amount of diversification of the portfolio of assets: the lack of its diversification is accepted as being risky.

Hence I may conclude that the main problem of private savings is labelled as the lack of impersonal trust in financial institutions and financial instruments which they offer to private investors. When choosing the form of assets the preference is given to instruments about which one can get insider information using his or her personal contacts. Decisions on the basis of any public source information (advertisements or financial analytics) are made when personal contacts are exhausted or absent. In this case the choice is made between short-term risky holdings and consumption, improving of the quality of life. The last option is more attractive because people in this case keep control over their money.

If that is true it is interesting to find out what kind of instrument could become attractive for people even if no personal control will be possible. This question is important because in the presence of the increasing trends of real incomes it is not clear whether the growing saving possibilities of households will be able to overcome the narrow scope of abilities to trust into impersonal financial institutions. On the basis of the data I collected there are two basic strategies which could be clearly indicated. The first strategy is based on trust in Russian banks with the dominant state share in capital stock (Sberbank) and trust in big well-known foreign banks (City bank, Raiffeisen, etc). There can be current accounts, short term deposits, or credit cards and loans. This strategy is based on the priority of safety over profitability of savings.

The second strategy comes from the necessity to have higher returns from savings. If savings are made in order to accumulate resources for buying a house or an apartment, assets with low interest rates do not fulfil the requirements because if the rate of price rise on the real estate market is high and rate of return of assets is low over a few years one may end up with a bigger sum of money but with a less real estate purchasing capacity. In the absence of mortgage schemes one is forced to look for the higher return rate and as a result has to deal with higher risks.

Investing recipe based on personal financial experience

As my sampling comprises exclusively the people experienced in this or that type of financial activity, they were asked on what had to be done to make smartmoney investments. The list of formula developed by them based on their experience comprises the below recommendations:

One needs to exercise personal control over the money invested or at least understand the financial scheme operation of the enterprise where they invested their money. If there is no such control or understanding, there is a risk of losing not only the revenue, but all the invested money. Almost everyone mentioned this.

• ...No matter who you trusted your money to, you cannot forget about it. Even if you provided an apartment for administration. You have to control everything. You have to permanently control the market. Because the situation may change. You have to control companies, though you will never get the whole information. When bank started to peter out, nobody told us that they had been interconnected. One bank will lug away others. But this is politics. Nobody can control it, it's very difficult (Int. 23).

• ...You can invest your money only into something you can control (Int. 17).

• ...Let me say, we cannot live by the principle «We're sitting still, and our money keeps on growing» even with banks (Int. 19).

• I'm used to trusting something I myself can manage (Int. 12).

• ...There are people who like playing poker, and there are ones who like playing tennis. I play tennis and do not play poker. Neither do I play roulette. I don't care for it. I'm a player, I play games, but these are the games where the result, the winning probability depends only on me. I do not play games of chance, I'm not essentially interested in it. Roulette, poker, and all this — I don't care for it (Int. 9).

• ...One has to control everything. Money will not grow just like that (Int. 15).

• ...I think that in this country this is not yet possible — investing the money and deriving the income. Money brings money only if you personally control the process or if you're needed for the business. Otherwise, investing is a high risk, you may gain for sure, but this is a pure lottery. ...I have already told you that if there is no control, the risk is high. If there is control, the risk is still there, but you can estimate it, not being engaged in a guesswork (Int. 10).

• INTERVIEWER: Is it possible in Russia — money works, while the man is taking rest or is occupied with anything else? RESPONDENT. This system is well developed in western countries — one can hire a manager, while in this country managers will write off their losses at small investor's expense. Igor K.

• I would say that if counting on a good regular income, I would invest my money into the business I'm myself engaged in. Probably, I would share it with something, provided I would legally stay in the know, somehow influence the situation (Int. 16).

If personal control is impossible, or one lacks competence to exercise it, one should better not invest, but if there is a strong desire, the respondents think that it is necessary to get an independent expertise opinion on the project, opinion of the experts in the money investing sphere.

• ...The project expertise by an outsider organization, (expertise) by an adviser who was engaged in this project design (Int. 18).

• ...I would definitely try to collect as much information as possible. I would look for it in the Internet, business magazines, though I read them every day. I would consult some people of the sphere. For instance, if it was a bank, I would ask some bankers who are acquaintances of mine, as to their opinion on the situation in this bank. They would recommend something. I would collect as much information as possible (Int. 13).

• INTERVIEWER: How do you get the information on financial investment possibilities? What sources do you trust? RESPONDENT: It's hard for me to answer this question, because this is an information fusion, I'm used to rechecking the information, for newspaper advertisement or simply mass media information is not enough. It also concerns hearsays or information provided by operators rendering these services. We live in an information environment. I can hardly say where I primarily get the information from. INTERVIEWER: Are there any opinion leaders for you in this sphere? RESPONDENT: Yes, there are. These are acquaintances of mine who earned enough money for me to trust their competence (Int. 2).

• ...The most important are recommendations by people I know (Int. 8).

The majority of respondents think that if there is a possibility, it is better to deal with a foreign company or a bank. This is due to the fact that foreign companies, on the one hand, have an experience and good international repute, know the business culture and are less influenced by the Russian government.

• ...I'm still more inclined to trusting the American or European market, than the market of this country (Int. 23)

• ...As a matter of principle, I'm inclined to buying shares of the fund that invests money into Moscow real estate in this or that form, especially if this fund is backed up by a reputable trademark, pereferably a western one, belonging to European, American multinationals acting on our market (Int. 30).

• ...As far as I can guess, the most qualified are a number of import structures acting on this market. There are Colliers, GVA, some more, that offer services of trading real estate buildings administration (Int. 18).

• ...One can also deposit money into banks abroad — it is also reliable, but not that profitable (Int. 10).

• RESPONDENT: I'm attracted by western banks, because they have their experience and they never cheese their investors. While all of our banks have done it. ...How can they break a western bank? They can drive it out of the market, but they cannot break it. If it leaves the market, I will still be its customer. It never cheeses its customers.

• INTERVIEWER: What if a western company enter the market? If it's not a banking company, but a share investment fund which you do not consider to be reliable in the Russian market, will you trust the western share fund?

• RESPONDENT: I don't really know. I will consider what they have to offer. But they will not function in this country (Int. 14).

Although some respondents said that when investing into the Moscow real estate market, the company that has no connections and local authorities' support will not be able to efficiently invest funds.

• INTERVIEWER: Does it matter if the company is foreign or domestic? Shall one be more confident in foreign companies? RESPONDENT: As far as Moscow real estate and construction is concerned, I would be more confident in our companies. INTERVIEWER: Why? RESPONDENT: Because there are certain Moscow traditions. What is a Moscow construction company. An outsider company cannot simply get the Moscow market sector. It has to enlist Moscow authorities' support, establish stable business contacts with contractors, etc. It is difficult for foreign companies to do this (Int. 12).

Some respondents doubt that foreign financial companies emerging on the market are such to the full extent. Russian affiliates of parent companies look more like Russian companies, than foreign ones.

• INTERVIEWER: — You always specify whether the Russian market is concerned. What about foreign companies that have now entered the Russian market? RESPONDENT: — They are not foreign. They are only liable for obligations of ZAO «Reiffeisen», ZAO «Citybank». There are Russian structures. INTERVIEWER: — Still, maybe this is related to the fact that they are connected with foreign companies or their banking culture is better? RESPONDENT: — No, the culture has nothing to do with it (Int. 29).

• ...I see no sense in investing into western banks, for I don't consider them to be more reliable than the savings bank. If the crisis shatters the savings bank, the City-bank will not feel very good either. It doesn't matter, for the City-bank, Reiffeisen are 100% Russian companies. Their western parent companies will not bring their money here. If the City-bank invested its funds into some risky transaction and lost much money, it would be exactly OOO City-bank-Moscow or whatever its name is, that would have the adverse balance. And I have no idea if it's the American City-bank that is liable for this City-bank obligations or not. It is not, most probably. That is it. If they were fools to buy YUKOS shares that declined three times, how would they mend the balance? (Int. 13).

Most of respondents consider that their acquaintances may help them make good investment, for they can warn on the oncoming crisis and help withdraw money in due time.

• ...The information shall be collected through personal connections and contacts, rather than newspapers and magazines (Int. 17).

• ...The answer is obvious — one shall deposit funds into the bank where you have some acquaintances who will warn you on a real danger and help you take your money back. This is the only reliability criterion, for there are no other criteria. Meanwhile one may passively keep one's money in the savings bank. There are no interests, but it is (safe) (Int. 9).

• ...The information basically comes from the people I work with. I do not pay much attention to advertisement or magazine articles. Moreover so, as it is well known that there are no independent jouranlists in this country. These are only personal recommendations by the people who work in this sphere (Int. 10).

• ...an acquaintance of mine is the bank president, and this bank is among top 50, so I feel good being a VIP customer and making all the estimates on the phone. I cannot say that the interest rate there is that high, but this bank suits me as a means of keeping and slightly increasing my money. Besides, it gives me the guarantee of having my money back under any conditions (Int. 2).

• One can invest only if there are personal guarantees of the man who, as you know, can personally influence the situation. This is what matters. For instance, the man who can personally influence the situation, might intimately know the head of this organization (Int. 16).

• INTERVIEWER: If you thought of depositing 5—10 thousand USD into a bank, how would you choose it? RESPONDENT: I would examine the market, consider the interest rate, ask my friends what bank is safe. I would not only consider magazine articles, but also the opinion of people I know and trust (Int. 27).

• I have a large amount depositing in a bank that belongs to my acquaintances. I know that they will give it back to me whenever I need it (Int. 33)

Tangible assets investments are preferred to financial ones. For, if financial instruments get burnt, an investor is left with only a sheet of paper. As for tangible assets investments, the asset value reduction does not entail destruction of a tangible object, whether it is gold or real estate. Tangible assets availability also secures you from the total loss of money, inasmuch as normally there can be no situations when gold or real estate costs nothing. Thus, when investing into tangible assets, there is a threat of losing revenue, but the whole asset will be kept in any case.

• ...Private bank is a private bank, they will always pursue their benefit only. This is why the most important is what cannot be taken away from you, what you possess. This is real estate, it's very difficult to take it away, investment reliability... in this case market fluctuations are slight — give or take twenty percent, that is why it is rather safe. It does not concern the primary market, where there is a danger of suspended construction, but rather the secondary market, or at the stage of surrender (Int. 18).

• ...These are fund investment declarations, as far as funds are concerned. One shall look for such funds that invest money into state papers, some backed assets. Maybe precious stones. Something fundamental (Int. 21).

The majority of people think that assets diversification is required for profitable investments, one shall not invest one's money into one kind of asset

• RESPONDENT: Everyone has their temper. Someone is ready to get a lower revenue taking less risks, someone can take the risk. But one shall not go bald-headed. INTERVIEWER: What amount in interest may it be out of all the assets? What do you consider to be the optimal amount to risk? RESPONDENT: That depends. The interest rate depends on the amount. In my case it may be ten per cent, some may need fifty, for my life is provided for, and all major problems are solved. When you need nothing else to buy for it. It's piteous to lose money, but your life will not change (Int. 23).

• ...Well, as the Russian saying goes, you cannot keep all the eggs in one basket. This is the old saying which is often ignored. One shall apply the diversification technique. A part of money may be transferred to the bank you know well, it would be better if someone recommended it to you. A part shall definitely be spent... self-invested, as one may call it. It might be understood in different ways — this is either housing or domestic

38

improvement, — because a moment later it will be much more expensive, than it is now. This might be education, children's education, if it's applicable, etc. A part of money may be spent on business. But one shall not give such money for someone's administration (Int. 12).

• ...One definitely should not put all money into one basket is this country. There are no such safe instruments in this country. That is why it is better to keep by little in different places (Int. 9).

• ...I do not invest my last kopecks. I can hardly tell where there is a rational aspect, and where there is irrationality. In some moment one says: that's it, I've seen five variants, this one seems to be the most reliable and attractive. One minimizes risks, maximizes revenue, they do not seem to cheat, someone knows something about them. Ok, I will give my money to them. At this, I would certainly divide money into two-three groups and deposit them to different sources (Int. 13).

When using the diversification technique, you should deposit the money you won't really need, this might be about 10—50% out of the total assets amount.

• ...The idea is that you should play with the money losing which you will not regret. This is different (Int. 15).

• ...I think that when investing in Russia, one shall use the same approach as when gambling in a casino. I haven't been doing it for quite a long time, but... If you can well lose something — you're welcome. It is worth doing it for the sake of the process. Investing into some personal or family savings, giving it in mortgage of some future plans believing that you will gain from it... I think it is absolutely wrong in terms of psychology. One will worry much. This is a very high emotional wear. (Int. 21).

• INTERVIEWER: We were speaking about baskets and dividing. What investment percent is it worth investing into a risky instrument, and what — into safe? RESPONDENT: That depends on an amount. It is thought that 25-30% shall be invested into a risky instrument — not more. If the amount is not that big — up to 50%. But these are only my thoughts (Int. 26).

• What percentage of your assets is now invested into highly risky instruments? What are these instruments?

• It happened when I was engaged in SIFs, it is not exactly business, but the risk remains. The amount of investment is everybody's own choice, it's a matter of taste, no advice can be given here. In my case it was about a half, but it's whatever you may like (Int. 28).

39

15. Conclusions

I started from the idea of PIH/LCH that savings cannot be explained by current income alone. If consumption decisions are taken by households in order to maximise utility over time, taking into account the amount of overall resourses of a decision unit, the estimation of that overall wealth becomes crucial. In standard economic models it is commonly accepted to refer to human and non-human wealth as an approximation of the amount of the overall resources. However, households, especially in the periods of uncertainty, fragility of financial institutions and systemic risk, may perceive the total amount of resources differently. They can consider their network ties and personal contacts as well as different personal skills[9] to be potential or actual means for raising funds in difficult times. Social and cultural capital may accompany or even substitute for financial and human capital in the process of consumption smoothing. Social networking or 'investing' into the embodied skills to earn money in difficult economic circumstances may begin to be considered more attractive than saving money with the help of objectified (external) financial instruments like bank deposits or securities which are at risk to be damaged. The 'investing' strategies are put in inverted commas because social and cultural capitals are not created by savings, e.g. spending money in a way which postpones consumption for the future. On the contrary, they are rather accumulated during the actual consumption. That means that activities in which people are used to being engaged in as a part of their everyday consumption increase their earning capacity in hard times of systemic crises, and are used to derive income in order to keep the marginal utility of consumption constant. That is why, in spite of the facts of excessive sensitivity of consumption to incomes, a strategy of consumption smoothing does not disappear. When uncertainty and fragility of financial system is reduced, people again tend to use financial savings to smooth their consumption. Social capital is also used for consumption smoothing. Even though people invest into networks which are external to them, these networks are not as objectified as financial assets, since they are partly rooted in the embodied qualities of individuals who participate in the network.

The rest of the paper is devoted to the assembling and evaluation of the evidence to support the theory and to consider it against other plausible alternatives. The availability of appropriate data on household savings in Russia is discussed in order to dispel the suspicion that excessive sensitivity of consumption which is revealed in the analysis of data of Russian Longitudinal Monitoring Study can be artificially constructed due to its survey methodology.

---

[9] Apart from educational degree and professional experience.

On the whole, the idea that the lack of savings, positive and negative, as well as savers in Russia can be explained by the low level of incomes has not been fully verified on the basis of RLMS data. Current incomes do give the possibilities for savings but people do not use them, probably because they do not have the appropriate financial tools for savings. I conclude that the low level of incomes fails to explain the lack of savings of Russian households since the share of financially active households does not relate to the dynamics of the level of real per capita household incomes. Using qualitative data I provide empirical evidence that the shortage of financial savings results from the lack of trust in financial institutions and high uncertainty about the future prospects of financial system as a whole.

Literature

Alderman H., Paxson C. Do the Poor Insure? A Synthesis of the Literature on Risk and Consumption in Developing Countries // Bacha E. (ed.). Economics in a Changing World. L.: Macillan, 1994. Vol. Development, Trade and the Environment. Ch. 3. P. 48–78.

Ando A., Modigliani F. Tests of the life cycle hypothesis of saving: com-ments and suggestions. Oxford Institute of Statistics Bulletin, 1957. Vol. 19. P. 99–124.

Ankidinova N.V. On population's income: hard currency has to be taken into account. Moscow: Development Center, 2003 [Акиндинова Н.В. О доходах населения: нужно разобраться с валютой. Доклад Центра Развития, июнь 2003 г.].

Attanasio O. Consumption // Talor J., Woodford M. (eds.). Handbook of Macroeconomics. Amsterdam: Elsevier Science B.V., 1999.

Blinder A., Deaton A. The time series consumption function revisited // Brookings Papers on Economic Activity. 1985. No. 2. P. 465–511.

Browning M., Crossley T.F. The life-cycle model of consumption and saving // Journal of Economic Perspectives. 2001. Vol. 15. No. 3. P. 3–22.

Browning M., Lusardi A. Household saving: micro theories and macro facts // Journal of Economic Literature. 1996. Vol. XXXIV. P. 1797–1855.

Campbell J., Mankiw N. Permanent income, current income and consumption // Journal of Business and Economic Statistics. 1990. Vol. 8. P. 265–279.

Carroll C. D. Buffer-stock saving and the life cycle/permanent income hypothesis // Quarterly Journal of Economics. 1997. Vol. 112. No. 1. P. 1−55.

Carroll C. D., Samwick A. A. The nature of precautionary wealth // Journal of Monetary Economics. 1997. Vol. 40. No. 1. P. 41−71.

Carroll C. How does future income affect current consumption? // Quarterly Journal of Economics. 1994. Vol. 109. No. 1. P. 111−147.

Deaton A. Saving and liquidity constraints // Econometrica. 1991. Vol. 59. No. 5. P. 1221−1248.

Deaton A. Understanding Consumption. Oxford: Oxford University Press, 1992.

Deaton A. The Analysis of Household Surveys: A Microeconometric Approach to Development Policy. Baltimore: The Johns Hopkins University Press, 1997.

Denizer C., Wolf H.C. Household Savings in Transition Economies // NBER working paper. 1998. 6457.

Diksin I., Rimashevskaya N. (eds). Savings of the Population of Russia: Analytical report. M.: Infograf, 1997 [Сбережения населения Российской Федерации: Аналитический доклад. Научные руководители И.Е.Дискин, Н.М.Римашевская, М.: Инфограф, 1997].

Duesenberry J.S. Income, Saving and the Theory of Consumer Behavior. Cambridge: Harvard University Press, 1949.

Fisher I. The Theory of Interest: As Determined By The Impatience To Spend Income And Opportunity To Invest It. N.Y.: The Macmillan Company, 1930.

Flavin M. A. The adjustment of consumption to changing expectations about future income // Journal of Political Economy. 1981. Vol. 89. No. 5. P. 974−1009.

Foley M., Pyle W. A Note on Russian Household Savings During the Transition. Mimeo, 2000.

Friedman M. A Theory of Consumption Function. N.Y.: Princeton, National Bureau of Economic Research, 1957.

Gregory P., Mokhtari M., Schrettl W. Do Russians really save that much − alternate estimates from the Russian longitudinal monitoring survey // The Review of Economics and Statistics. 1999. Vol. 81. No. 4. P. 694−703.

Hall R. E. Stochastic implications of the life cycle-permanent income hypothesis: theory and evidence // Journal of Political Economy. 1978. P. 971−987.

Ivanov Yu., Khomenko T. Problems and methods of the savings statistics according to the system of national accounts // Economic Journal of HSE, 1998 [Иванов Ю.Н., Хоменко Т.А. Проблемы и методы статистики сбережения населения в соответствии с концепциями СНС // Экономический журнал ВШЭ, 1998. Т. 2. № 4. С. 508−515].

Keynes J.M. The General Theory of Employment, Interest, and Money, Harcourt, Brace and World Inc. N.Y.: Inc., 1964 [1936].

Mayer T. Permanent Income, Wealth, and Consumption: A Critique of the Permanent Income Theory, the Life-Cycle Hypothesis and Related Theories. Berkeley: University of California Press, 1972.

Modigliani F., Brumberg R. Utility analisys and the consumption function: an interpretation of cross-section data // K.K.Kurihara (ed.). Post-Keynesian Economics. Rutgers University Press, 1954. P. 388−436.

Modigliani F., Ando A. The life cycle hypothesis of saving: Aggregated implications and tests // American Economic Review. 1963. Vol. 53. P. 55−84.

Nikolaenko S.A. Private savings in Russia // Economic Journal of HSE, 1999 [Николаенко С.А. Личные сбережения населения // Экономический журнал ВШЭ. 1999. Т. 2. № 4. С. 500−507].

Paxson C. Using weather variability to estimate the response of savings to transitory income in Thailand // American Economic Review. 1992. Vol. 82. No. 1. P. 15−33.

Skoufias E. Consumption smoothing in Russia Evidence from the RLMS // The Economics of Transition. 2003. Vol. 11. No. 1. P. 67−91.
Skoufias E. Consumption smoothing during the economic transition in Bulgaria // Journal of Comparative Economics. 2001. Vol. 32. P. 328−347.

Stillman S. The Response of Consumption in Russian Households to Economic Shocks // IZA Dicussion Paper. No. 411. SSRN Electronic Paper Collection, 2001.

Wolpin K.I. A new test of the permanent income hypothesis: the impact of weather on the income and consumption of farm households in India // International Economic Review. 1982. Vol. 23. No. 3. P. 583−594.
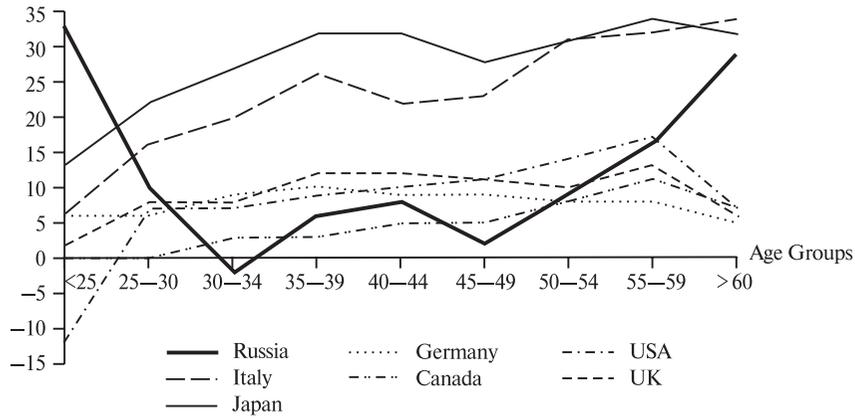
Figure 1. Saving rate-age profile

Table 1. *Date of interviews in RLMS, % of all interview in a wave*

Year (wave)	Jan.	Sept.	Oct.	Nov.	Dec.	Total in a wave
1994 (5)	3.9			30.1	**65.7**	100
1995 (6)			**76.3**	23.4	0.1	100
1996 (7)			**77.2**	22.0	0.7	100
1998 (8)			1.0	**82.3**	16.5	100
2000 (9)		2.1	**81.4**	15.7	0.8	100
2001 (10)		4.6	**76.0**	15.7	3.7	100
2002 (11)		6.9	**75.1**	14.5	3.5	100
2003	0.2					

Table 2. *Index of the real money incomes of households, in % to nominal money incomes in December 1992, Goskomstat*[10]

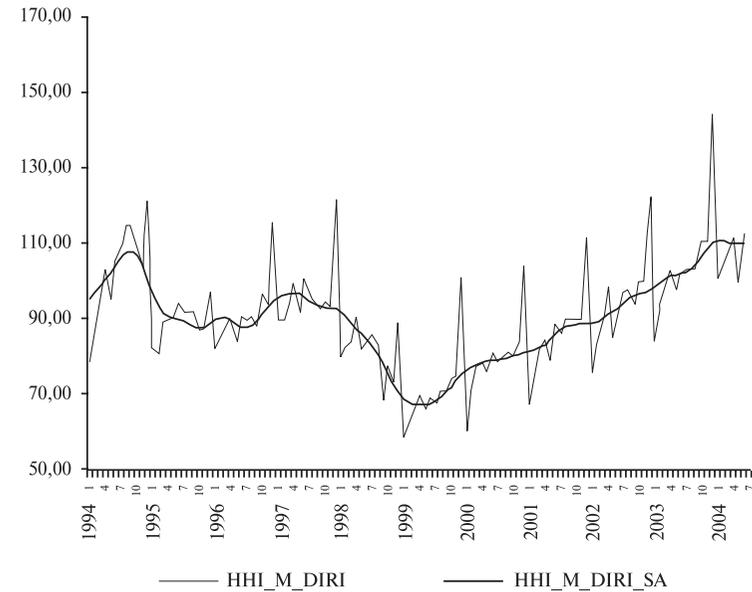| Year (wave)	Sept.	Oct.	Nov.	Dec.
1994 (5)	114.8	109.1	103.6	121.2
1995 (6)	92.4	86.8	87.7	97.3
1996 (7)	87.9	96.6	93.7	115.3
1998 (8)	68.3	77.4	72.8	89.3
2000 (9)	81.0	79.7	83.9	104.3
2001 (10)	89.6	89.7	90.2	111.4
2002 (11)	94.4	99.5	99.5	122.3

Figure 2. Index of real money incomes of households, Goskomstat

HHI_M_DIRI — The real money incomes of households
HHI_M_DIRI_SA — The real money incomes of households, with seasonal adjustment

[10] In % to nominal money incomes in December, 1992 http://stat.hse.ru/exes/tables/HHI_M_I.htm, based on GKS macro data.

Table 3. *Monthly rate of savings, in % of monthly money incomes*[11]

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	To-tal
1994	20.1	25.1	24.7	30.3	27	30.4	29.2	29.2	30.3	27.2	27.4	32.8	28.7
1995	21.4	23.7	25.1	25.9	22.4	25.6	24.3	22.3	21.8	20.6	24	27.8	23.8
1996	16.1	24.9	25.2	25.9	22.1	27.5	24.4	24.1	20.8	26.5	25.6	33.5	25.1
1997	21.4	25.8	25.5	28.8	27.7	31.1	27.3	23.4	18.7	19.9	17.8	27.6	24.9
1998	11.9	20.2	17.9	22.9	16.3	17.1	16.3	9.1	2.1	13.9	11.2	21.2	15.2
1999	4.7	13	10.7	17.9	14	15.9	13.8	11.4	10.2	12.3	11.4	24.6	14
2000	0.4	16.4	17.6	19.4	17.5	21.1	17.5	15.1	15.9	13.7	16.3	22.4	16.7
2001	4.4	15	17.1	19.1	13.3	20.8	17.4	17.3	17.5	15	14.7	21.4	16.6
2002	7.6	17.1	16.9	24.1	14.8	19.5	20.3	18.3	15.5	17.7	17.4	23.4	18.2

Figure 3. A relationship between index of real incomes
and rate of savings, Goskomstat, $r = 0.88$

Figure 4. Relationship between index of real per capita incomes
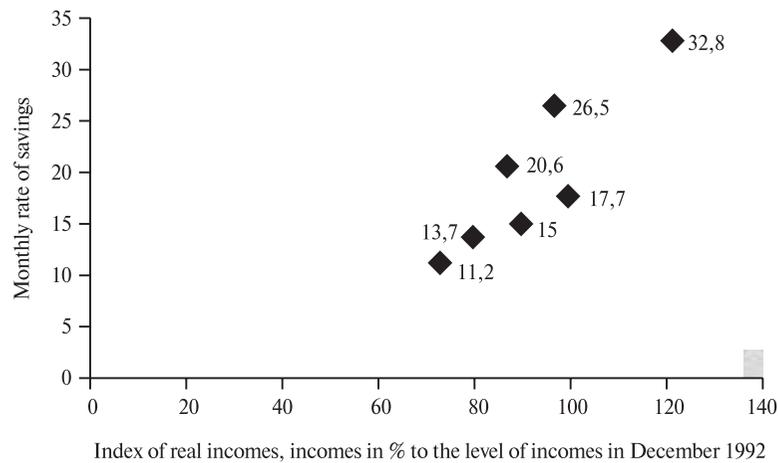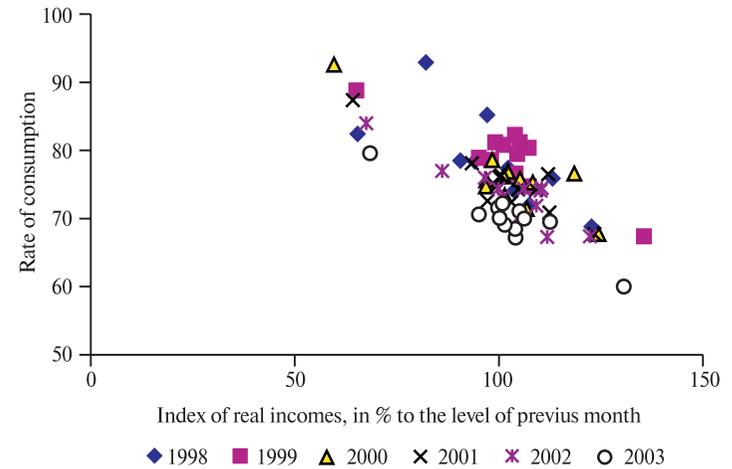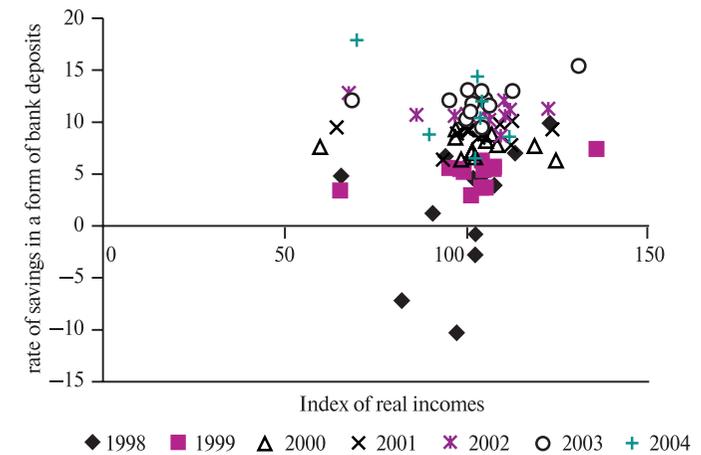and rate of consumption, Goskomstat, $r = -0.75$

Figure 5. A relationship between index of real per capita incomes
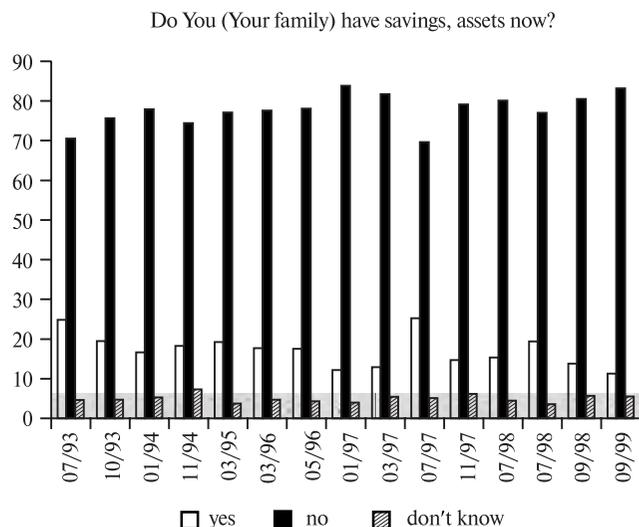and rate of savings, Goskomstat, $r = 0,17$

[11] Goskomstat short-term macro data, July 2004.

Do You (Your family) have savings, assets now?

Figure 6. Financial assets of households

Table 4. *Propensity to save or to spend money (VCIOM, Sept.1998)*

L8_1 L8_12	If you had received a large sum of money what would you prefer to do with it?	N	%
1	Would like not to spend, would like to save it	228	9.5
	Would like to spend it:		
2	on current needs	983	40.8
3	on big purchase	256	10.6
4	on real estate (an apartment of a house)	468	19.4
5	on education	268	11.1
6	on medical treatment	437	18.2
7	on vocation and entertainments	92	3.8
8	on investments in my own business or shares	76	3.1
9	on real estate (land, summer house)	83	3.5
10	on buying a car	206	8.6
11	on other needs	81	3.4
12	Difficult to say	197	8.2
	Number of respondents	2408	

48

Table 5. *The difference between incomes[12] and food expenditures[13]*

	1994[14]	1995	1996	1998	2000	2001	2002
Current income equal or less than food expenses accounts for dissaving	13.7	15.3	14.9	12.6	10.2	7.3	7.6
Food expenses are less than 51% of incomes accounts for saving	37.8	35.6	33.3	35.1	43.9	48.2	52.5
Total potentially active	51.5	50.9	48.2	47.7	54.1	55.5	60.1
Food expenses are 50-99% of incomes accounts for no savings	33.9	30.5	25.8	29.4	32.3	31.5	29.8
System missing	14.6	18.6	25.9	22.9	13.6	13.0	10.1

Table 6. *Share of households which have been for the last 30 days, in % of all households in a sample[15]*

	1994	1995	1996	1998	2000	2001	2002
Financially inactive (neither savings nor dissavings)	52.9	59.1	57.6	60.3	61.1	58.8	62.0
Financially active:	47.1	40.8	42.3	39.7	38.9	41.2	38.0
Were saving	17.1	12.1	10.6	11.8	14.9	16.0	17.3
Were saving in one form and dissaving in another	13.8	11.1	10.3	8.8	9.0	10.6	9.3
Were dissaving	16.1	17.6	21.4	19.1	15.0	14.7	11.5
Median per capita real incomes as a sum of all incomes, prices of 1994	114	94	93	66	92	125	134

[12] Incomes measured a sum of money incomes from different sources.
[13] Food expenditures are solicited as: How many rubles have been spent in your family on food at home and out for the last 30 days?
[14] Calculated on cross-section data representative for the whole Russia
[15] In this table calculations were made on the basis of cross-sections which are representative for the whole Russia.

49

Table 7. *The difference between subjectively satisfactory level of incomes and the current one*[16]

	1998	2000	2001	2002
Less than the adequate	68.1	70.1	71.0	78.2
Equal to the adequate	0.4	0.3	0.4	0.3
Higher than the adequate	6.0	6.8	7.0	7.0
Total	74.5	77.2	78.4	85.5
System Missing	25.5	22.8	21.6	14.5
Total	100.0	100.0	100.0	100.0
Ratio (median)[17]	−2.00	−1.78	−1.40	−1.58

◆ Incomes vs % of families which save, corr = 0,8
■ Incomes vs % of families which incomes are higher than food expenditutes, corr = 0,8
△ Incomes vs % of financially active families, corr = −0,21

Figure 8. Incomes and financial activity (reduced sample)

◆ Relationship between incomes and % of families which save, corr = 0,8
■ Relationship between incomes and % of potentially active families, corr = 0,84
△ Relationship between incomes and % of financially active families, corr = 0,09

Figure 7. Incomes and financial activity

---

[16] Round V sample dwelling unit.
[17] Ratio of subjectively satisfactory level of income to the level of current income.

Препринт WP9/2005/05
Серия WP9
Исследования по экономике и финансам —
Research in economics and finance

Редактор серии *А.В. Белянин*
Внешний редакционный совет —
В.М. Полтерович (ЦЭМИ РАН и РЭШ),
O. Sussman (Oxford Business School)

Кузина О.Е.

Парадоксы сберегательного поведения
российских домохозяйств

(на английском языке)

Публикуется в авторской редакции

Зав. редакцией *А.В. Заиченко*
Технический редактор *Н.Е. Пузанова*