



NATIONAL RESEARCH UNIVERSITY  
HIGHER SCHOOL OF ECONOMICS

*Dilyara Ibragimova*

**CONSUMER EXPECTATIONS OF  
RUSSIAN POPULATIONS:  
COHORT ANALYSIS (1996–2009)**

BASIC RESEARCH PROGRAM

WORKING PAPERS

SERIES: SOCIOLOGY  
WP BRP 41/SOC/2014

This Working Paper is an output of a research project implemented at the National Research University Higher School of Economics (HSE). Any opinions or claims contained in this Working Paper do not necessarily reflect the views of HSE.

*Dilyara Ibragimova*<sup>1</sup>

## **CONSUMER EXPECTATIONS OF RUSSIAN POPULATIONS: COHORT ANALYSIS (1996–2009)<sup>2,3</sup>**

The research deals with the analysis of consumer expectations of Russian population, which are mediated by many socio-demographic characteristics: income, age, education, place of residence, sex, etc. The paper points up the influence on variable “age” because it is rather complex itself. First, actual age represents biological characteristics. Second, “age” represents a unique birth cohort in terms of socialization and formation of life experience. Finally, all ages feature influence by a time period effect that reflects the socio-political, economic, and informational phenomena of the macro environment. Solving the problem of “identification” (i. e. the separation of these three effects), which inevitably arises in case of cohort analysis, is based on theoretical views concerning the character of consumer expectations and the results of empirical testing. Its point is that the aggregated Consumer Sentiment Index (CSI) reflects the general socio-economic situation in a country at a certain time and allows us to use the CSI as a distillation of a specific time moment. The information base of research is the data of consumer survey although not the panel, but conducted over a 15-year period on the same methodology and sample. All 79 waves of cross-section data (from May 1996 to September 2009) were converted into a “quasi-longitudinal design”, the total sample of dataset was 182,507 respondents. The regression analysis demonstrates that belonging to a cohort actually determines significantly consumer sentiments. However, the nonlinear correlation describing such dependence showed that an increase of optimism/pessimism in respect for the economic and social development of the country happens non-uniformly from one cohort to another. In addition, the article attempts to implement approach to differentiation of generations, is not based on age differences, and the relationship with historical events. The research shows that an indicator such as the CSI could be one instrument for defining the time boundaries of the generations.

JEL Classification: A14

Keywords: consumer expectations; cohort analysis; generation analysis; consumer sentiment index; consumption; saving.

---

<sup>1</sup> National Research University Higher School of Economics. Department of Economic Sociology. Associate Professor; E-mail: [dibragimova@hse.ru](mailto:dibragimova@hse.ru)

<sup>2</sup> I sincerely thank S. Nikolayenko (Vnesheconombank, Moscow), whose friendly advice and ideas have helped me tremendously while conducting this research and O. Kuzina (National Research University Higher School of Economics, Moscow) for her support and valuable recommendations while preparing this paper.

<sup>3</sup> This study was carried out with support from research grant No. 12-01-0228, provided through the 2013-2014 Academic Fund Program administered by The National Research University Higher School of Economics.

## *Introduction*

In a market economy, the role of consumers is extremely important because their expenditures play a determining role in the dynamics of internal demand, accordingly resulting in the acceleration or deceleration of economic growth. Consumer decision making about purchasing goods (especially major items) or depositing savings depends not merely on objective factors, such as income and inflation; instead, the impact of such factors on people's behavior in a modern economy is determined by their subjective expectations concerning their financial situations, their employment status, inflation, and the prospects of economic development in general. The Consumer Sentiment Index (CSI) is a unique indicator, measured on the basis of surveys that allows subjective factors to be integrated into a macro-level analysis.

Consumer expectations depend on many socio-demographic characteristics: income, age, education, place of residence, sex, etc. For example, a cross-sectional analysis of data from consumer surveys demonstrates that optimism regarding estimations and expectations about the economic situation in a country is higher than average among younger people, whereas older people endorse a lower than average level of consumer sentiment. At first glance, the picture is rather trivial: people who own such social resources in their youth are more optimistic and more active in their behavior in a consumer market.

However, a variable such as "age" is itself rather insidious. In the form of an arithmetic expression, "age" is the difference between the current year and the year of birth, but in actuality, the variable "age" represents a combination of three different factors. First, actual age represents biological and, to some extent, psychological characteristics. Second, "age" represents the factor of cohort (in this case, defined as the birth year)—that is, the terms of socialization and formation of life experience in definite conditions. Finally, "age" represents the time that is reflected in the socio-political, economic, and informational phenomena of the macro environment.

In other words, did the consumer expectations of twenty-year-old Russians in 1998 differ from those of twenty-year-old Russians in 2007? If so, in what way? Or, for example, what are the consumer expectations of the generation that came of working age in the year 2000 and the expectations of the cohort whose personality formation took place in the transition period from the late 1980s to the early 1990s?

In our opinion, researching these questions is interesting from multiple perspectives. First, it helps to understand the general dynamic of consumer expectations and its determinants. The assumption about the significance of the cohort effect lets us suppose that people whose formation was taking place during the favorable economic period of the 2000s could be more optimistic, even as they mature, than the generation of their parents and grandparents. In contrast, if they feel the recent trend toward economic stagnation, they are going to be less optimistic on average than people of the same age but of a different time period. Because it has been revealed that changes in "consumer sentiment forecast changes in spending" [Carroll, Fuhrer, Wilcox 1994: 1398], these inherently psychological factors could significantly influence macroeconomic processes if a large group of people simultaneously change their behaviors with respect to deciding whether to spend or save money.

Second, a cohort analysis of consumer expectations could be treated as the basis for estimating the general level of optimism among different social groups, indirectly indicating their adaptive potential. The advent of consumer expectation surveys in post-war America was mostly stimulated by the desire of businesses to know if people were going to spend their savings. However, it afterwards emerged that CSI could also answer more general questions about the level and dynamic of optimism concerning the economic and social development of the country [Ibragimova, Nikolayenko 2005: 11-12].

Third, the analysis of the dynamics of consumer sentiment in the context of cohorts in the aforementioned study periods could help to enrich the existing knowledge about the formation of people's market behavior. Is it possible to discuss the adaptation of different cohort representatives to the new economic circumstances or to discuss their "market adaptation"? If so, to what extent could we discuss it?<sup>4</sup> For example, Y. Levada states that the level of support given to economic changes did not vary significantly in the period 1994–1999, whereas the difference between age groups was noticeable across time when different cohorts were considered [Levada 1999]. All this information testifies to the existence of a cohort effect—the differential results of socialization that emerged in the transition period.

The main aims of this study were 1) to identify the age profile of consumer expectations by comparing them across different cohort profiles and 2) to demonstrate the cohort effect on consumer sentiment.

The proposed paper is organized in the following way: first, I will review theoretical approaches for using cohort analysis in the social sciences in general and for studying consumer expectations in particular. Then, I will describe the conceptual model of the study. Subsequently, I will analyze the quantitative data dynamics of consumer sentiment for the 13-year period in general and, from the perspective of age/cohort groups, by using regression to explore the role of socio-demographic factors in the formation of consumer expectations—including, as a separate predictor, an individual's membership to a definite cohort. A separate discussion is dedicated to the analysis of cohorts, generations, and the historical process.

### *Background: Theoretical Approaches*

The starting point of consumer expectations analysis was the psychological economic model articulated by Katona, who posited that, in situations of uncertainty, the economic expectations of consumers significantly influence the economy in general. Consumer expenditures (initially, expenditures on household durables) depend not only on the ability to buy but also on the willingness to buy. By "ability to buy," he meant the consumer's current level of income, existing financial assets, and access to credit. "Willingness to buy" is based on the personal estimations and expectations of people concerning their welfare position and view of the country's economic development in general [Katona 1968: 22]. Katona supposed that people

---

<sup>4</sup> In a broad sense, the word "adaptation" means the process by which a person accommodates to a changing environment. However, this accommodation to the new environment does not eradicate the individual's organization and identity in this environment; to the contrary, accommodation requires saving these characteristics. The most stable adaptation, as Levada pointed out, "does not mean the full assimilation of person with system of social requirements" [Levada 2000:469]. Otherwise, there is socialization. In a crisis, adaptation could establish a "functional equivalence with a process of socialization and resocialization" [Golovin 2004: 22].

would spend savings and even increase expenses if the decrease in income were regarded as temporary and the long-term expectations were optimistic. Otherwise, if a further decrease of income were expected, then people would prefer to reduce consumption and increase savings [Katona 1975: 242].

Over the past few decades, many empirical studies on the nature of expectations have been conducted (i.e., rational, partly rational, and adaptive) [Noble, Windsor Fields 1982; Baghestani 1992; Grant, Thomas 1999; Howrey 2001; Carroll 2003]. There have also been studies verifying and explaining the predictive power of forecasts based on consumer expectations. At the same time, the influence of expectations is explored through their interactions with different macroeconomic indicators—there are some indicators that people influence indirectly (viz., the dynamic among income, production, employment, and inflation) [Carroll, Dunn 1997; Thomas 1999; Das, Soest 2000; Curtin 2003; 2010]. Additionally, there are indicators that reflect the results of people’s activities (e.g., consumer expenditures and savings) [Adams 1964; Juster, Wachtel 1972; Mishkin et al. 1978; Carroll, Fuhrer, Wilcox 1994; Kwan, Cotsomitis 2004; Ludvigson 2004; Souleles 2004; Easaw, Garratt, Heravi 2005; Heim 2010].

This separate group of studies is represented by works that aim to explore the determinants of consumer expectations, understand how they develop, and analyze their structure.

The Director of the Survey Research Center at the University of Michigan, R. Curtin, compared the influence of private and public information while studying the formation of unemployment expectations to a “mirror” of expectations about personal income. The author came to the conclusion that it is private information rather than any official announcement of economic information that dominates the formation of unemployment expectations [Curtin 2003: 552]. People’s views of the economy are based on life experiences and not on scientific knowledge. However, it is exactly this personal consumer experience – obtained in the process of dynamic local incomes, employment terms, inflation, and availability of goods in local markets – that is the significant factor for formulating expectations. To refer back to our topic, such life experience is a reflection of the cohort effect—i.e., the common terms of socialization for a group of people who were born within a definite period of time.

Curtin conducted an analysis of the differences in levels of consumer optimism between the populations of Russia and the USA depending on income and age [Curtin 2000]. The correlation analysis demonstrated that there is a negative relationship between age and estimations of perspectives of a country’s economic development. However, in the Russian data, this correlation is stronger than in the American data. This means that younger people in Russia are much more optimistic in their estimations of the country’s economic future than the middle aged and the elderly. Age differences in Russia and the USA are especially apparent with respect to purchasing durables [Curtin 2000: 9].

Analyzing those findings, the author assumed that “[i]t is likely, however, that for the Russian data the age relationship also reflects other factors. In response to the economic transition, it is likely that younger respondents are the most able to change, while older Russians are more likely to resist, especially those near or in retirement” [Curtin 2000: 14]. It should be added that this situation could be partially connected to the distribution of income and the overall amount of savings during a life-cycle—the specific case of Russia in the period 1990–2000 was that

younger people were well provisioned, a state of affairs that diminished sharply over time. In many developed countries, personal income starts relatively low at younger ages, grows rather quickly, peaks at the end of middle age, and declines afterward (but not as rapidly as in Russia) [Ibragimova, Nikolayenko 2005: 47].

However, Shorrocks demonstrated that the “classic” hump curve, reflecting the change in income/assets with age, does not fit reality if the cohort effect is not taken into consideration. The decrease of assets at a specific age, observed in cross-sectional data, could be the result of analyzing different generations at different periods of their lives, thereby rendering the conclusion about the life-cycle curve false [Shorrocks 1975: 158]. From this study, it became standard to account for cohort and time effects in empirical studies of a population’s consumption and savings behaviors.

Of course, researchers previously drew attention to the analysis of differences within cohorts—the notion, as well as the method, of cohort analysis came to sociology from demography. In demography, a cohort is a group of people who experience the same demographic events over the same period of time (e.g., birth, marriage). The theoretical basis of the sociological approach for cohort understanding is Mannheim’s concept of “generation,” which adopts two main postulates. First, “[i]ndividuals who belong to the same generation, who share the same year of birth, are endowed, to that extent, with a common location in the historical dimension of the social process” [Mannheim 1952: 290]. However, historical localization has only potential significance for a generation because “[w]e shall therefore speak of a generation as an actuality only where a concrete bond is created between members of a generation by their being exposed to the social and intellectual symptoms” [Mannheim 1952: 303]. Thus, generations are treated as communities that reflect different stages of people’s lives from the point of view of socialization and the existence of specific socio-cultural characteristics. This approach is also applied to cohorts in sociology’s conceptualization of the term.

The conceptual frame for the usage of cohort analysis in the social sciences was defined by the famous demographer, Norman Ryder, who wanted to direct the attention of sociologists toward the study of time series of parameters for successive cohorts of various types, in contradistinction to conventional period-by-period analyses [Ryder 1965: 861]. He defined the cohort as “the aggregate of individuals ... who experienced the same event within the same time interval” [Ryder 1965: 845]. “The cohort record is not merely a summation of a set of individual histories. Each cohort has a distinctive composition and character reflecting the circumstances of its unique origination and history” [Ryder 1965: 856].

The multicollinearity of three factors—age, cohort, and historical period—marks the specificity of cohort analysis. All three features are interconnected, as demonstrated by the age of cohort representatives and the historical period both being measured using the same linear scale and one-year interval. A priori, there is no possibility of untangling these effects: every one of them is described by the equation that includes two other effects. The differentiation of the effect’s influence, known as the “identification problem,” is the main complication while conducting cohort analysis [Nauen 2006: 139]. It is not an accident that, in the literature, the special notion of the “age-period-cohort analysis” exists, and refers to cohort analysis focused on the separation of such effects. By now, researchers have gained certain experience in solving the problem; however, there are no ideal or universal options, and it is very doubtful that there could be one.

One of the possible strategies of solving the identification problem is to eliminate it at the beginning of a study by setting limitations and assumptions (both theoretical and mathematical). These might include any of the following: the neglect of one dimension—for example, period [Baltes, Reinert 1969: 169] or age [Heckman, Robb 1985]; putting limitations on coefficients when the sum of time effects is equal to zero and said effects are treated as orthogonal to the time trend [Deaton, Paxson 1994: 347];<sup>5</sup> assuming an equal effects influence on the dependent variable for two (or more) cohorts/age groups/time periods, leading to the opportunity to estimate effect influences with the help of a regression model [Mason K.O. et al. 1973];<sup>6</sup> and so on. The search for a more or less universal method for the differentiation of age, cohort, and period effects with the help of different statistical procedures continues; however, “such attempts to separate statistically the effects confounded in cohort data [are considered] ‘a futile quest,’ ... except in the unlikely event that all effects are nonlinear” [Glenn 2005: 6].

The alternative to formal quantitative procedures for solving the identification problem is an approach aimed at understanding what determines the effects of time and cohort. This search for the “real factors” of influence could be performed using different methods (e.g., visual analysis, an expert’s involvement, administration of interviews, usage of statistical data and the mass-media). All these methods share one commonality—the attempt to bypass the limits introduced by the multicollinearity of these three effects by considering the initial (latent) factors of change from which these effects arise.

In the framework of this approach, the productive solution to the identification problem was implemented by the famous German sociologist and empiricist, Blossfeld, in his study of career opportunities for German youth [Blossfeld H.-P. 1986]. For time-effect modeling, he used data from social statistics. Upon factor analyzing a time series (1950–1982) of 14 economic and social development indicators in Germany, two latent factors were extracted (using a principal components method), which explained 96.4% of dispersion. Because these factors are orthogonal, they may be simultaneously added to a single equation to solve the problem of separating cohort and time effects [Blossfeld H.-P. 1986: 215]. The value of this solution is that “it gives a specific example of [the] analysis of historical period latent influence[s] on [a] cohort’s socialization” [Golovin 2004: 115].

One more methodological issue that needs to be considered is connected to the relationship between cohort and generation. With the number of theoretical approaches to the problem of generations, there is no consensus on the empirical usage of this concept.<sup>7</sup> There are problems of operationalization—for example, “what are the boundaries that separate generations? How could one generation be separated from another in the sequence of generations changing? Which criteria should be used?” [Semenova 2005: 81]. I find Nauen’s thesis reasonable, namely that,

---

<sup>5</sup> The same approach was used in Attanasio’s work analyzing the saving behavior of American households that belong to different cohorts [Attanasio 1998]. It has also been used in analyses of the saving behavior of households in Norway [Halvorsen 2003] and elsewhere.

<sup>6</sup> Age, period, and cohort are each recoded as a set of dummy variables, with each dummy variable usually representing a range of 5 or 10 years. When the variables in a set are entered into a regression analysis as predictor variables, one variable in the set must be omitted to get the program to run. The critics of this method point out that the subjective choice of two identical effects could be mistaken and, consequently, change the results significantly. This technical way of solving the problem, in Glenn’s opinion, could not be satisfying because the main assumption about the additive characteristic of the effects is incorrect [Glenn 2005: 15-16].

<sup>7</sup> See, for example: Dubin [1995a; 1995b; 2005], Savel’eva, Poletayev [1997], Glotov [2004], Levada [2005], Shanin [2005], and others.

“compared to the generation approach in sociology[, the] cohort analysis method allows [one] to make more differentiated analysis of social dynamics because [a] cohort is a smaller social community than [a] generation and thus is . . . easier to describe, operationalize and empirically analyze” [Nauen 2006: 142]. In other words, a generation could include a number of cohorts that could be defined, for example, by birth year. However, this does not mean that cohort analysis is just a “technical” issue. The matter of cohort analysis requires explaining process dynamics using differences in socialization and the changing of cohorts that are formed under the influence of different events, individually or in combination.

Thus, when conducting cohort studies, it is appropriate to maintain the historic-sociological approach as the main methodological paradigm. This means that time periods of both past and present times should be treated as socio-historical integrities with their specific social patterns and unique events, with their alternatives and multiple orientations to different processes.<sup>8</sup>

### *The Conceptual Model of the Study*

The experience of measuring the dynamics of consumer sentiment shows that CSI is the aggregated macroeconomic indicator that genuinely reflects and sometimes predicts the dynamic of a country’s economic growth in general. In other words, two directions of CSI usage could be defined—the first is connected to its explanatory power, and the second to its predictive power. Although the leading role of the CSI with respect to macroeconomic indicators is extremely interesting,<sup>9</sup> for building of the conceptual model in our study, it is important to answer the question, to what extent does the CSI reflect the dynamic of a country’s economic development?

That is why the correlation between the components of the CSI and the indicators of Russian macroeconomic development, which lie beyond the sphere of influence from consumers but impact their welfare position (for example, dynamics of income, production, employment, inflation), should be considered. The regression analysis of the time series 1997–2010 generally shows that the rate of growth for real income for the population was a significant predictor of people’s estimations concerning changes in personal welfare in the previous year (accounting for 57% of variance).<sup>10</sup> If the dependent variable is the aggregated index of consumer sentiment, 83% of its fluctuations in the period 1997–2010 could be explained by three indicators: current unemployment status, the 12-month growth of five basic economic sectors, and the inflation rate<sup>11</sup>. The influential character of these indicators correlates with theoretical views—i.e., the increase in inflation rates and unemployment is reflected negatively in CSI dynamics, and the increase in production is reflected positively. The high correlation between the aforementioned macroeconomic indicators and consumer sentiment demonstrates that the Russian population

---

<sup>8</sup> For more details about historical sociology as an approach to the study of society, see Shanin [1997]; on historical sociology as a strategy of socialization, see Golovin [2004: 78-89].

<sup>9</sup> For example, in the USA, the homeland of consumer surveys, the Consumer Sentiment Index (CSI) is one of the components of the Composite Index of Leading Indicators, which, together with the Composite Index of Coincident Indicators and the Composite Index of Lagging Indicators, helps to analyze and forecast the cycles of the American economy. It is worth noting that among all indicators that are included in the mentioned indices, the Consumer Sentiment Index is the only one that is estimated based on sociological survey data. All other indicators are collected from statistical data. For more details, see <http://www.investopedia.com/university/conferenceboard/conferenceboard2.asp>.

During the twenty years from 1975 to 1995, these indices were published by the Bureau of Economic Analysis, US Department of Commerce, but since 1996, they have been published by the Conference Board [Moylan 2010: 3]. On the forecast potential of CSI in Russian terms, see: Ibragimova, Nikolayenko [2005: 106-113].

<sup>10</sup> See equation 1 in Table 2 in the Appendix. For more details, see: Ibragimova, Nikolayenko [2005: 97-106].

<sup>11</sup> See equation 1 in Table 1 in the Appendix.

accurately perceives what is happening in the economy [Ibragimova, Nikolayenko 2005: 105-106].

Thus, the character of the interactions between the Consumer Sentiment Index, its components and macroeconomic indicators allows us to state that the CSI's accumulated time (period) effect. In other words, the CSI can be used as an aggregate of socio-economic indicators of a country's development at a specific moment of measurement.

Moreover, the CSI uniqueness stems from the fact that, although the CSI is an independent aggregated macroeconomic indicator, it is based on mass sociological survey data—i.e., in micro data, such that it reflects the sentiment of the large part of a country's population. This characteristic reflects the methods used in the CSI's measurement because it aggregates thousands of private opinions that are independent and do not influence each other. There are five basic questions asked for the CSI.<sup>12</sup> Two questions focus on how the personal financial situation of the household has recently changed and how it is expected to change in the upcoming year; two questions focus on the outlook for the economy over the near and longer terms; and one question focuses on buying conditions for household durables. The basic formula for the Consumer Sentiment Index is as follows [Curtin 2002: 4]<sup>13</sup>:

$$CSI_t = \sum_{j=1}^5 (P_{jt}^f - P_{jt}^u) 100 + 100, \quad (1)$$

where

$CSI_t$ —the Consumer Sentiment Index at time  $t$ ;

$P_{jt}^f$ —the proportion of the sample giving favorable replies to the  $j$ -th question at time  $t$ ; and

$P_{jt}^u$ —the proportion of the sample giving unfavorable replies to the  $j$ -th question at time  $t$ .

By its methodological nature, the CSI, just like any other aggregated index, is a value that is obtained artificially by empirical data processing and reflects something akin to an “over individual” process [Levada 2000: 346]. This means that all personal differences are smoothed. However, the formula can be expressed in terms of individual responses [Curtin 2002: 5]:

$$CSI_t = \sum_{j=1}^5 \sum_{i=1}^n \frac{x_{ijt}}{n} (100) + 100, \quad (2)$$

where

$CSI_t$ —the Consumer Sentiment Index at time  $t$ ;

$x_{ijt} = 1$  if there is a favorable response to the  $j$ -th question by the  $i$ -th respondent at time  $t$ ;

$x_{ijt} = -1$  if there is a unfavorable response to the  $j$ -th question by the  $i$ -th respondent at time  $t$ ;

and

<sup>12</sup> We should note that the wording of the questions and the methodology of CSI estimation varies in different countries; however, both correspond to the concept of psychological economics.

<sup>13</sup> Curtin R. (2002) Surveys of Consumers: Theory, Methods, and Interpretation. NABE 44th Annual Meeting, September 30, 2002, Washington, DC. <http://www.sca.isr.umich.edu/fetchdoc.php?docid=26396>

$x_{ijt} = 0$  for all other responses to the  $j$ -th question by the  $i$ -th respondent at time  $t$ .

Based on formula (2), individual indices for each respondent can be calculated:

$$CSI_{it} = \sum_{j=1}^5 x_{ijt}(100) + 100, \quad (3)$$

where

$CSI_{it}$ —the Consumer Sentiment Index of the  $i$ -th respondent at time  $t$ .

The value of the individual index (just as with the aggregated index) can vary between 0 and 200. The index is equal to 0 if all of the respondent's answers are negative, and equal to 200 if all answers are positive.

What determines the individual index? Obviously, the estimations and expectations of consumers are determined by external and internal factors. By external factors, we mean a country's socio-economic situation. Such a situation is the "same" for all but, of course, is interpreted differently in every person's mind in a specific way, based on his own socio-demographic characteristics, which represent internal factors. In other words, these internal factors are nothing other than the differentiated presentation of the "socio-economic" time effect for every single individual:

$$CSI_{it} = f(E_t, \Omega_t), \quad (4)$$

where

$E_t$ —external factors (i.e., the general socio-economic situation) at time  $t$ ; and

$\Omega_t$ —internal factors (i.e., the aggregate of individual socio-demographic characteristics) at time  $t$ .

As was previously shown, the aggregated Consumer Sentiment Index reflects the general socio-economic situation in a country at a certain time. Thus, it is logical that the deviation between the individual and aggregated indices for every single respondent is caused by personal socio-demographic characteristics. Mathematically, it is the following:

If  $E_t = CSI_t$  then formula (4) is:

$$CSI_{it} - CSI_t = f(\Omega_t). \quad (5)$$

Socio-demographic characteristics include a whole range of indicators—e.g., gender, age, level of education, income, place of residence, and employment status. I suggest that we also consider the cohort indicator by birth year to demonstrate if there is any influence of a cohort effect on consumer expectations. By "cohort effect," the following is meant: "those differences in social characteristics of cohort members that exist between different cohorts while comparing their characteristics over a long period of time and that are explained by different perceptions of social reality and historical events, which catch them at different ages and social positions" [Golovin 2004: 86]. In other words, people who were born in the same year have the same process of socialization and accumulate life experience in the same socio-economic, socio-political, and cultural conditions of the historical time. At the same time, the conditions of socialization vary

depending on other characteristics—e.g., gender, level of education, place of residence, social and material status. That is why, in this study, I will try to consider the maximum number of socio-demographic indicators and include them in a regression model to reveal a “pure” cohort effect. The dependence of the cohort effect on demographic factors, such as cohort quantity, birth rates, and death rates, should also be considered. This information will be used for analyzing and interpreting the results of both descriptive statistics and the regression model. Thus, the correlation that is going to be tested is the following:

$$CSI_{it} - CSI_t = f(\textit{gender}, \textit{age}_t, \textit{educ}_t, \textit{income}_t, \textit{empl}_t, \textit{settlm}_t, \textit{cohort}), \quad (6)$$

where

*gender*—the respondent’s gender;

—the age of the respondent at time  $t$ ;

—the level of education at time  $t$ ;

—the level of income at time  $t$ ;

—the employment status at time  $t$ ;

—the place of residence at time  $t$ ; and

*cohort*—the cohort membership by birth year.

Another option is to use as a dependent variable not the deviation between individual and aggregated indices but rather the value of the individual index for every respondent and, at the same time, use the aggregated Consumer Sentiment Index as a proxy variable that replaces the time indicator (Formula 7). Thus, the problem of identification (i.e., the separation of age, period and cohort effects) will be solved based on theoretical views concerning the character of consumer expectations and the results of empirical testing. That will allow us to use the CSI as a distillation of a specific time moment:

$$CSI_{it} = f(CSI_t, \Omega_t). \quad (7)$$

Let us now consider the conceptual definition of the term “cohort.” In the sociological understanding (based on Mannheim’s theory of generations and approaches introduced by Ryder), a cohort is a group of people whose processes of socialization take place over the same historical period and under the same conditions.

However, the main questions are: what is meant by socialization and what (if any) are the chronological boundaries of this process? In a broad sense, socialization is a process of personality formation—i.e., the formation of an individual as a social creature.

There are two approaches to determining which phases of the life-cycle are important during the process of personality formation. Inglehart’s “socialization hypothesis” in the context of the intergenerational value change theory states that “[t]he relationship between socioeconomic environment and value priorities is not one of immediate adjustment: a substantial time lag is involved because, to a large extent, one’s basic values reflect the conditions that prevailed during one’s pre-adult years” [Inglehart 1997: 33]. As the author noted, “This concept permeates the literature from Plato through Freud and extends to the findings of contemporary survey research.

Early socialization seems to carry greater weight than later socialization” [Inglehart 1997: 34]. This means that there is a so-called “formative age” in an individual’s life—i.e., the years that are the most important in personality formation.

The socialization hypothesis helps account for apparently deviant behavior. For example, “the miser who experienced poverty in early years and relentlessly continues piling up wealth long after attaining material security,” etc. [Inglehart 1997: 34]. In their recent paper “Growing Up in a Recession,” Giuliano and Spilimbergo asked the following question: does the macroeconomic environment that surrounded the individual during the period of personality formation influence the individual’s perception and preferences in different areas? Based on the General Social Survey in America (1972–2010), the World Value Survey (administered in 37 countries), and a survey of high school seniors in 1972 (17–18 years of age; the Longitudinal Survey of the High School Class), the authors tested the “impressionable years hypothesis,” which states that “core attitudes, beliefs, and values crystallize during a period of great mental plasticity in early adulthood (the so-called impressionable years) and remain largely unaltered thereafter” [Giuliano, Spilimbergo 2013: 2]. The results showed that people who came through macroeconomic shocks in their youth (e.g., recession, crisis) were more likely to stick to status or corruption success strategies than to meritocratic strategies, more likely to support the redistribution of national wealth to eliminate inequalities, and more likely to vote for left-wing parties. At the same time, the influence of macroeconomic cataclysms is long-lasting.

The advocates of this approach do not deny the possibility of changes in attitudes and values in a grown person (i.e., resocialization or secondary socialization). However, they note the existence of external and internal circumstances, which reduce the likelihood of profound personal changes (ranging from a “decline in energy and loss of brain tissue, to disengagement and a decrease in interest in events distant from one’s immediate life, . . . to the accumulation of friends who share similar world views”), that confirm the “aging-stability thesis” [Glenn 1980].

Golovin claimed that it is important not to mix notions of resocialization and adaptation. An adaptation to a changing environment that does not lead to changes in a person’s identity or gaining new values and personality characteristics reflects the phenomenon of adaptation that is rather widespread in society. However, during a crisis, in a period of profound change, adaptation could acquire a “functional equivalence to the process of socialization or resocialization” [Golovin 2004: 21-22].

The representatives of the second approach deny the existence of dominant years in personality formation, theorizing that socialization takes place throughout a person’s entire life, during which a person remains open to new ideas and impressions. Therefore, people correct and change their attitudes as a response to changing life circumstances (the lifelong openness hypothesis). Brim was the first to express this idea [Brim 1966; 1980], which then became part of “life-span developmental psychology.” In recent years, this hypothesis has been actively developed and was also called “theoretical perspective” in studies by Paul Baltes of Max Planck University [Baltes 1987: 622]. The core idea of this theory is that there is a continuous evolution of people from birth to death because people face many challenges, possibilities, and situations during their lives that become the source of internal development and differ in their directions, characteristics, and power. Baltes interprets development not as incremental growth but as a

process in which periods of growth (gain) combine with periods of decline (loss) [Baltes 1987: 613].

The advantage of the first approach is that the existence of “formative ages” in an individual’s life allows for extracting cohorts and differentiating among them in an empirical study. The next step in this approach is to determine at what ages the formative years occur. Inglehart defines this period as the “pre-adult years” [Inglehart 1990: 68]<sup>14</sup>. In this case, maturity, in Nauen’s articulation, “the period from late youth to early adult age” [Nauen 2006: 138], is understood and is distinguished from any formal status that reflects the moment of full civil capacity. In Dalton’s work [1977], there was a goal to estimate more systematically when formative socialization occurs; toward this end, he used 1973 survey data from seven European countries. As a general economic indicator, he used the seasonally smoothed GDP index; as age points, he used the following: 10 years (reflecting the period of 8–12 years), 15 years (13–17 years), and 20 years (18–22 years).<sup>15</sup> He concluded that the economic conditions at age ten are the most significant. However, in the study, the concrete historical details of socialization and country specificity were not considered. As Abramson notes, “Dalton fails to consider that many of these respondents lived through World War I and that most experienced World War II. One basic difference among these countries is that Denmark was neutral during World War I and in World War II suffered a less draconian occupation than the other West European countries occupied by the Germans...A better analysis would include the effects of war rather than GDP alone” [Abramson 2011: 4]. Accordingly, the socialization of the population in different countries was not the same. Thus, when defining “formative age,” it is important to take into consideration the specifics of the socio-economic, juridical, cultural, and historical environments.

Giuliano and Spilimbergo tested the age intervals as “impressionable years” (while controlling for many variables) and concluded that the most significant age period is 18–25 years, when most attitudes and values develop [Giuliano, Spilimbergo 2013: 13].<sup>16</sup>

While studying the processes of political socialization, Golovin defined the phases of personality formation for Russians specifically. He based his work on the traditional Russian social studies principle of a person’s involvement in labor activity, critical age points (which were determined through expert interviews), and the biopsychosocial approach [Golovin 2004: 21-22].

Thus, taking into consideration everything that has been discussed in the present study, I define the formative period as 15–24 years. The most significant points of this period are the following: the beginning of the working age; graduation from 8 years (in the Soviet period) of school (15 years of age); increase in one’s legal responsibility (16 years of age)<sup>17</sup>; military service, the right to vote, the right to marry, adaptation to after-school life (18 years of age); graduation from a university, the beginning of adult life, marriage, the beginning of a professional career, and the modal age of childbirth for women (24–25 years; in the post-Soviet era, a “postponement” of giving birth was observed).

---

<sup>14</sup> “A substantial time lag is involved because, to a large extent, one’s basic values reflect the conditions that prevailed during one’s pre-adult years” [Inglehart 1990: 68].

<sup>15</sup> To operationalize this measure, yearly GDP indices (adjusted) were averaged for the five-year periods bracketing each formative age. For example, for a cohort aged 51 to 55 in 1973, the formative period at age 10 was estimated by averaging GDP from 1928 to 1932, when the age of the cohort members ranged from 8 to 12 years [Dalton 1977: 471].

<sup>16</sup> For the formation of political beliefs, 26-33 years of age is important.

<sup>17</sup> In post-Soviet Russia, it is age 14. However, in the research, the weight of the cohort that grew up after the collapse of the USSR is lower compared to other cohorts. We found it important not to lower the age boundary of the formative period.

The process of meaningfully separating cohorts in the empirical study according to the framework of the second approach to understanding socialization is rather complicated, if it is possible at all. With the intention of approximating of this approach, we plan to analyze the influence of the most important historical events (marked chronologically as a set of variables) on consumer sentiment formation and the level of overall optimism about a country's development. In this case, it is possible to track only the social events—not the events of personal life; consequently, the process of socialization will not be fully demonstrated. However, the addition of this variable as an independent one in the testing equation (Formulas 6–7) gives us an opportunity to meaningfully explore the cohort as a group of people who experienced a number of important events not only during their formative years but also during the whole life-cycle.

### *Research Information and Methodological Approach*

There are a number of data requirements for conducting cohort analysis, such as 1) completeness of information and 2) longitudinal data. In other words, the ideal data for such a study is longitudinal survey data on the same subject that was conducted over an extended period of time. In the absence of such data, the possible solution is to design so-called “synthetic panels”—i.e., the conversion of simultaneous survey data into a “quasi-longitudinal design.” In so doing, it is possible to extract cohorts and monitor the dynamics of their opinions during the life-cycle (or a long period of life). At the same time, such surveys should be conducted with certain regularity over a long period of time using the same methodology.

The database that fulfills these requirements is the one that was collected using the CSI survey from 1996 to 2008.<sup>18</sup> Sociological surveys for CSI measurement were conducted by the Levada-Center<sup>19</sup> once every two months (6 times per year, starting May 1996) with a special multistage stratified sample that represented the opinions of the adult (i.e., 16 years and older) population of the country. The sample size in each wave was 2100 respondents. For better representativeness, the data were weighted by gender, age, level of education, region, type of settlement, and political preferences (in the last election). The general statistical error was no more than 3 percentage points. In each wave, not only were the basic CSI questions asked but additional questions that provided explanations for people's opinions were also asked. Thus, there were 72 waves of survey data that were conducted regularly from May 1996 to June 2008,<sup>20</sup> when the project concluded due to various reasons. For the next several months, the surveys for CSI measurement were not conducted, but in December 2008, the Levada-Center began conducting its own CSI survey on a monthly basis, which is why, for the next period, I used the data that were provided by the Levada-Center to The Joint Economic and Social Data Archive. Unfortunately, not all of the data files contained the basic CSI questions—only six data files for 2009 (February, May, June, July, August, and September) and two data files for 2010 (November and December). It is worth noting that, beginning in December 2008, the design of the Russian sample was changed slightly: the number of respondents was reduced to 1600, and the initial age of respondents shifted to 18 years. Despite those changes and because there were other surveys conducted to measure CSI, I found it reasonable to use the data from the Levada-

---

<sup>18</sup> For more details about the project, its history, and its results, see Ibragimova, Nikolaenko [2005].

<sup>19</sup> The Levada-Center was where the first steps in CSI measurement were taken in Russia in 1993. For more details, see Ibragimova, Nikolayenko [2005: 14-18].

<sup>20</sup> In March 2008, the survey was not conducted.

Center for two reasons: first, to save the succession of data and, second, to have a technical opportunity to combine and compare these samples.

Thus, all initial survey data from May 1996 to September 2009 were merged into one dataset (the total sample was 182,507 respondents) that was used for further analysis.

To meaningfully define the cohorts and aggregate them into interval groups by birth year, it was necessary to 1) explore the most important social events that could affect cohorts; 2) connect these events with time periods; and 3) correlate these time periods with group of people who survived these events in their formative years. Because the formative years were defined as a 10-year period (15–24), time periods should be the same duration to eliminate the “crossing” of cohorts in the frames of their formative years. Although it is obvious that periods of twentieth-century Russian history could not be explicitly “arranged” in these time periods and that the historical process is characterized by its multiple orientation, I was nevertheless able to extract more-or-less homogeneous periods using certain assumptions.

Let us examine the extracted cohorts from the point of view of the concrete historical conditions of their socialization (Table 1). People who were born from 1902–1911 were combined into Cohort 1 (there were only 79 respondents in this cohort). The years of their active socialization coincided with crucial events in national history—the October Revolution, the establishment of Soviet power in the aftermath of civil war, and the policy of “military communism.” The confiscatory character of this policy caused a sharp local outcry and resulted in a wide range of anti-government peasant protests. Only the real threat of losing power forced the Bolsheviks in 1921 to gradually make some concessions, which led to the New Economic Policy (NEP). However, in late 1926 and early 1927, the impact of the agricultural crisis led to an attack on the NEP, resulting in the return of a policy of strict administrative methods.<sup>21</sup>

Table 1

**Historical periods and generations<sup>22</sup> of Russian society in the twentieth century**

<b>Cohorts by birth year (number of cohort)</b>	<b>Years of socialization (formative year)</b>	<b>Age at the first year of research (1996), years</b>	<b>Age at the last year of research (2009), years</b>
1902–1911 (K1)	1917–1926	85–94	98–107
1912–1921 (K2)	1927–1936	75–84	88–97
1922–1931 (K3)	1937–1946	65–74	78–87
1932–1941 (K4)	1947–1956	55–64	68–77
1942–1951 (K5)	1957–1966	45–54	58–67
1952–1961 (K6)	1967–1976	35–44	48–57
1962–1971 (K7)	1977–1986	25–34	38–47
1972–1981 (K8)	1987–1996	15–24	28–37
1982–1991 (K9)	1997–2006	5–14*	18–27

\* did not participate in the survey

The cohort of people who were born in 1912–1921 represents the first generation of Soviet people. They survived destitution in their childhood, connected to civil war, and in the years of

<sup>21</sup> The lives of this generation, which in general had adapted to the Soviet social order, has been studied with a sample of people born in 1906 by the Soviet demographer Urlanis and described it in the book, “The History of One Generation” [Urlanis 1968].

<sup>22</sup> In this case, the generation is treated as an aggregate equal to the number of cohorts by year of birth.

their socialization, the following events took place: processes of industrialization, collectivization, liquidation of illiteracy, intensive urbanization, and mass labor mobilization. “Tens of millions of women were attracted to labor and children were sent to nurseries and kindergartens. The family continued to lose its socialization value” [Golovin 2004: 123]. In other words, the personal formation of these people was connected with the economic, social, political, and ideological development of Soviet society. The political expression of this period was captured in the Constitution of 1936. The result of this period was “Stalin’s disciplining society,” which determined a new way of everyday life until the “Thaw” [Golovin 2004: 122].

The youth of people who were born 1922–1931 (Cohort 3) occurred in a period that was rather homogeneous in terms of its historical conditions. The main content of this period was war—the undeclared war on the Far East in 1939, the Soviet-Finnish war, and the beginning of the Second World War (September 1<sup>st</sup>, 1939). The Great Patriotic War and victory in that war were existential. In its formative years, this generation survived the destitution of war, the loss of family and friends (not only on the front line but also due to occupation and as a result of mass repression before the war), and the consistent tension of all powers at such a young age, but it managed to survive and could be called “the generation of winners.”<sup>23</sup> “The War not only united society but also gave new meaning to Soviet identity by treating the victory over fascism as a merit to all mankind” [Golovin 2004: 133].

People born in 1932–1941 (Cohort 4) survived the war during childhood, and their intensive socialization took place in the period of post-war economic restoration, the beginning of the “Cold War,” the emergence of the nuclear threat, the toughening of the political regime, a new iteration of Stalin’s repressions, the restoration of the “iron curtain,” the struggle against “cosmopolitanism,” and a wide attack on “Western influence.”

The formation of views of the people combined into the fifth cohort occurred during the period of the Khrushchev “Thaw.” The exposing of Stalin’s cult of personality, the democratization of the political regime, economic reforms, the Virgin Lands Campaign (Tselina), achievements in science and engineering (e.g., space travel and the development of the north), and the weakening of ideological pressure on culture, among other events and processes, influenced and developed the self-consciousness of the “men of the sixties.” Although, chronologically, the end of the “Thaw” is connected to Khrushchev’s resignation in 1964, many authors talk about the “glorious decade” or claim that the period of the 1960s lasted from 1957 until 1967 [Voronkov 2005: 177-178]. In other words, the reformations of this period (although they were inconsequential) influenced not only the formation of the “children of war” but also the people who were born after it and up to the 1950s. They are combined into a social community of those who were born in 1942–1951.

The years of socialization for people who were born in 1952–1961 (Cohort 6) took place mostly in the period of the “stabilization of Soviet society life,” which was connected to the accession of Brezhnev, who put an end to any criticism or self-criticism. On the occasion of the 50-year anniversary of Soviet power in 1967, Brezhnev declared “the developed socialism.” This period is also known for attempts at economic reforms that were connected with the name Kosygin (e.g., the widening of independent enterprises, changes in pricing, the reduction of directive-

---

<sup>23</sup> Golovin called this generation the “Defenders of the Homeland” [Golovin 2004: 133].

planned indicators with an emphasis on profit and profitability, the wide use of material stimulation). However, the “Prague Spring” of 1968 created the impulse to toughen foreign policy and led to the resistance to reforms that developed in the early 1970s.

The personal formation of people who were born in 1962–1971 coincided with the period that was later called the “Stagnation.” A transition was observed “... from a mobilization economy with its strict labor discipline, to a demobilization although still planned economy” [Golovin 2004: 124] when the appearance of “pilferers,” different disciplinary liberties, and the development of the postscripts method in the context of the official “movement for communist attitude to labor” became possible. Doublethink, the discrepancy between “kitchen talk” and public speeches, became almost the norm. At the beginning of the 1980s, economic stagnation became stronger, and shortages of goods reached an unprecedented degree, despite the significant investments in agriculture (e.g., in 1982, the Food Program had been approved) and food imports. The attempts to expand Soviet influence in different continents, the financing of inefficient regimes, and the Afghan War, which started with the introduction of troops in December 1979 and lasted ten years, all led to the exhaustion of the economy. Simultaneously, in the 1970s, protests against the system began; consequently, fights with dissidents began (e.g., the Helsinki Group, the 1975 rebellion on the “Storageevoy” under the direction of Sablin, the massive migration of Jews, the deportation of intellectuals).

We can assume that the seventh cohort is the most heterogeneous of all cohorts<sup>24</sup> because the period of active socialization of people born in 1968–1971 (the final years of the cohort’s interval) and people who were born in the following decade (1972–1981—Cohort 8) fell in the period of massive transformation of Soviet and post-Soviet society, the beginning of which can be dated to April 1985 (marked by the plenary session of the Central Committee of the CPSU and Gorbachev’s rise to power). However, the outset of these transformations can actually be said to have taken place in 1987, when, at the plenary session in January, the course of “reformation” was declared. The following years were characterized by fundamental historical events that allow us to think in terms of a change in the entire array of socializing conditions. Reforms of political institutions, the cancellation of Article 6 of the Constitution of the USSR (concerning the leading role of the CPSU), the elections of deputies in 1989 at the Congress of Deputies of the USSR, the election of the Supreme Soviet in 1990, the policy of publicity and the possibility of public debates, the law on cooperatives, individual labor activity, joint enterprises with foreign participation, the policy of “new thinking” in international affairs, the fall of the Berlin wall, the putsch of 1991 and the collapse of the USSR, among many other events, all happened over the course of 4–5 years and sufficiently demonstrated that a transformation of the whole social structure had taken place. However, the following events, especially in the economic sphere, were even more radical and are often called “shock therapy”: the liberalization of prices in January 1992, the hyperinflation and devaluation of people’s savings that followed, the liquidation of product deficits, voucher privatization, the liberalization of foreign trade, etc. In other words, the formative years of this cohort were combined with a transitional period when society moved from following rules of distribution based on egalitarian principles to a market economy with all of its advantages and disadvantages.

---

<sup>24</sup> However, it is incorrect to think about the homogeneity of consciousness of other cohorts’ representatives. The most homogeneous is most likely the cohort of “winners”—the people who participated in, survived, and won the Great Patriotic War.

The youngest cohort in our sample combines people with the birth years from 1982–1991. Due to their age, they were unable to take part in the first waves of the survey, but in 2009 the oldest among them were 27. These people, who did not know the Soviet period as adults, were familiar with the principles of market competition and grew up in the relatively favorable period of economic and political stabilization of the 2000s.

Let us further develop our examination of these cohorts in the context of their socio-demographic characteristics (Table 2). The observed gender shift in older cohorts, in which females dominate, is related to the existing, significant gap in life expectancy between women and men. Concerning the level of education, the pattern is also rather obvious: the younger the cohort is, the higher the total educational level it has attained.<sup>25</sup> It is important to highlight that it would be a mistake to suggest that the level of education is dependent on age—as a result of improvements in schools and professional education, the cohort and historical period affects the drivers of this pattern—not the effect of age. The picture is rather homogeneous in terms of types of settlements and corresponds to the total sample in general. The people from the middle-aged and younger cohorts had the highest level of income. However, it was not the oldest cohorts that had the lowest income level but rather people who were born 1932–1941—i.e., the people who reached the age of retirement in the complicated economic period of the 1990s.

Table 2

### Socio-demographic profiles of the cohorts

	<i>Cohorts (age of birth)*</i>								Total Sample
	<b>K2</b> (1912–1921)	<b>K3</b> (1922–1931)	<b>K4</b> (1932–1941)	<b>K5</b> (1942–1951)	<b>K6</b> (1952–1961)	<b>K7</b> (1962–1971)	<b>K8</b> (1972–1981)	<b>K9</b> (1982–1991)	
Cohort quantity, respondents	2,088	14,301	22,925	20,876	32,087	31,257	32,241	16,638	172,492
<i>Socio-demographic characteristics</i>									
<i>Gender:</i>	<i>Column %</i>								
male	28.5	36.7	42.1	45.0	46.5	47.6	48.8	50.8	45.7
female	71.5	63.3	57.9	55.0	53.5	52.4	51.2	49.2	54.3
<i>Education:</i>									
Lower than secondary	79.8	79.1	67.5	45.5	35.6	28.8	35.7	62.5	46.6
Secondary, specialized secondary	16.6	16.3	25.1	42.6	52.0	56.6	51.7	32.5	42.8
Higher, including unfinished	3.7	4.6	7.4	11.9	12.4	14.6	12.6	5.0	10.6
<i>Type of settlement:</i>									
Moscow and Saint-Petersburg	14.9	10.3	9.8	10.8	9.8	9.7	9.2	9.0	9.8
Large cities	18.7	20.5	22.5	25.5	25.5	25.6	27.2	26.0	25.0

<sup>25</sup> The exception is the cohort that combines people whose birth years fall in the 1982-1991 timeframe, in which the share of people who had less than a secondary education was 62.5%. However, this observation is explained by the fact that a lot of respondents from this cohort at the time of survey had not graduated from school.

Small towns	37.3	36.8	37.3	39.1	40.7	40.1	39.4	40.2	39.3
Villages	29.1	32.4	30.4	24.5	24.0	24.6	24.2	24.7	25.9
<i>Quintiles on monthly income per capita:</i>									
1 (Lower income)	9.1	11.0	13.9	19.6	23.4	25.0	21.4	21.7	20.1
2	22.5	26.0	29.1	20.7	17.8	17.6	16.3	15.4	20.0
3	28.0	34.2	31.3	19.6	15.9	15.3	14.5	16.2	19.9
4	29.0	21.6	17.0	19.5	20.8	19.4	20.5	21.4	20.0
5 (Higher income)	11.4	7.2	8.6	20.5	22.2	22.8	27.3	25.2	19.9

\*There were no data for Cohort 1 due to its small size (79 persons).

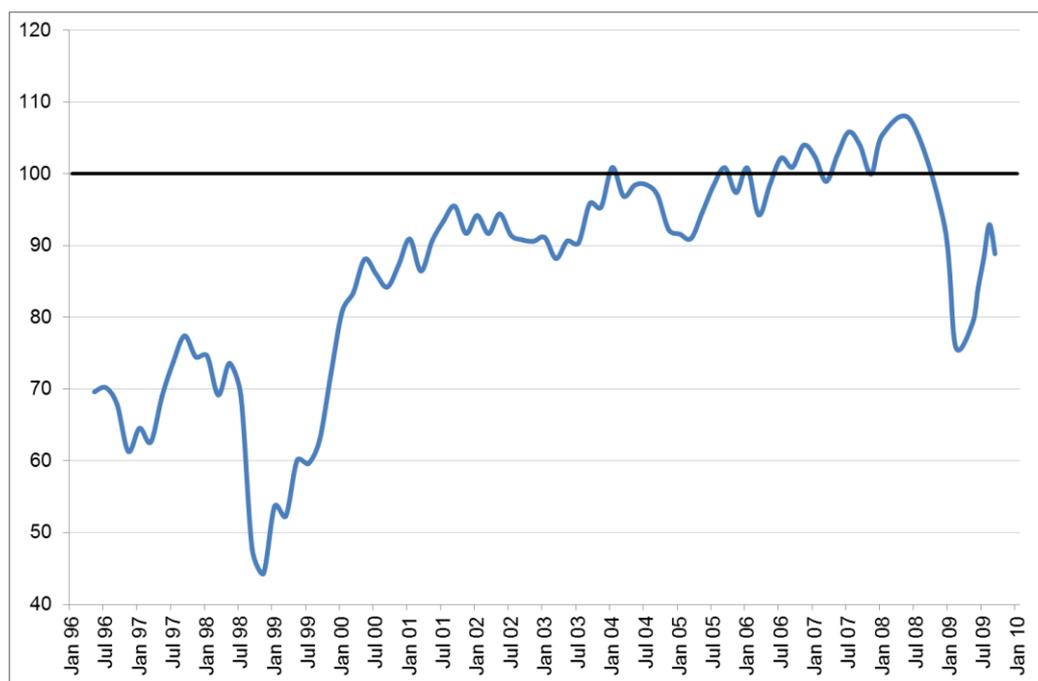
\*\* The quantity shown takes into account the weighting coefficient.

### *Hypotheses and Results*

Before making the hypothesis of the study, let us address the dynamics of consumer sentiment in general and in the context of age/cohort groups, specifically. This will be the starting point for further assumptions.

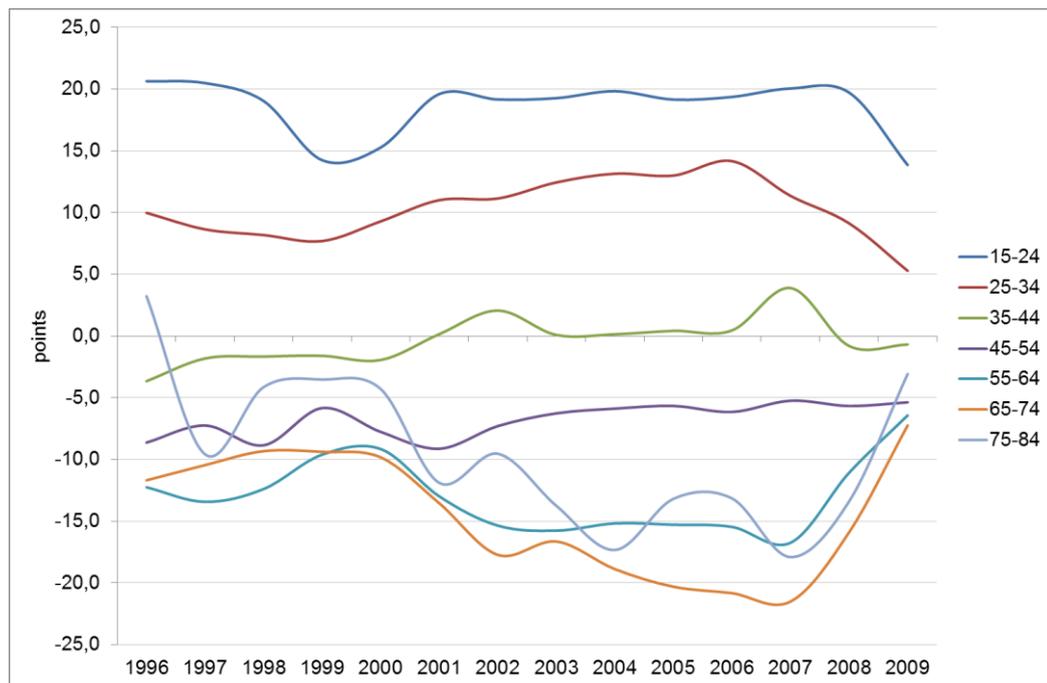
Examining the general dynamics of consumer sentiment over the 13-year period of time, we can define a few phases. In 1996 there was a predominance of pessimistic sentiments in society (the aggregate index is lower than 70 points). Then, an improvement in sentiments, which started in the relatively successful year of 1997, was interrupted by the economic crisis of 1998. However, the restoration process occurred rather quickly—from late 1999, steady growth in consumer estimations and expectations was achieved, and the values of the CSI in the first half of the 2000s reached a new level and averaged 92–93 points. In summer of 2004, a slight decrease of sentiments was observed, caused by the “mini-crisis” in the banking system. After that, the dynamic trend improved until the autumn of 2008 as a moderate upward trend. Moreover, the value of the CSI even exceeded the threshold mark of 100 points. As a result of the 2008 economic crisis, a sharp change of balance happened, and there was a predominance of negative estimations and expectations (the index value decreased to the level seen in 1997). Although some improvement was observed at the end of the spring of 2009, a return to pre-crisis values was achieved only in the middle of 2012. In other words, this crisis, compared to the crisis of 1998, was longer lasting and much more profound in its consequences.

**Figure 1. Dynamics of the Consumer Sentiment Index, 1996–2009**



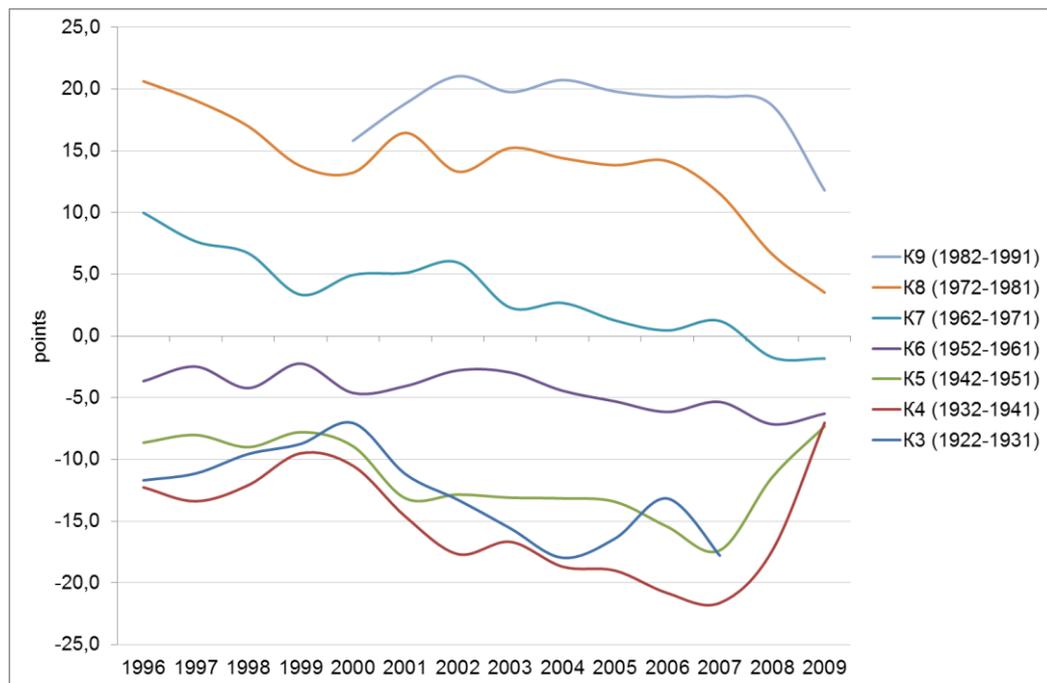
In Figure 2, the deviation dynamics of the CSI by age group from the CSI values of the total sample are presented. At first, it is obvious that younger people were much more optimistic than older people. However, there are a number of nuances. First, the differences between separate age groups were not equivalent—the greatest difference was between people in the 35–44 and 25–34 groups, whereas among the older ages there was a less visible difference. Second, the most pessimistic people were not the oldest but the group aged 65–74. Third, the crisis of 2008 was much more noticeable for people younger than 40. Fourth, the estimations and expectations of people aged 35–44 actually reflected the dynamic of the aggregated CSI for the total sample.

**Figure 2. Deviation dynamics of the CSI by age groups from the CSI values of the total sample, 1996–2009, annual averages**



Let us now take a look at the same diagram but in the context of cohorts that are more “floating” compared to the “rough” age groups (Figure 3). The strongest difference appeared between the cohorts born from 1962–1971 and 1972–1981. Most likely, this is connected to the fact that people who were born from 1962–1971 were partially socialized in the Soviet period. In their last formative years, they were confronted with completely new concrete historical conditions that were caused by the “reformation” and the following social reforms. The differences in estimations and expectations of the older cohorts were not significant. However, the most pessimistic people were not “the war generation” but rather the “war children,” those whose socialization took place at the end of Stalin’s rule.

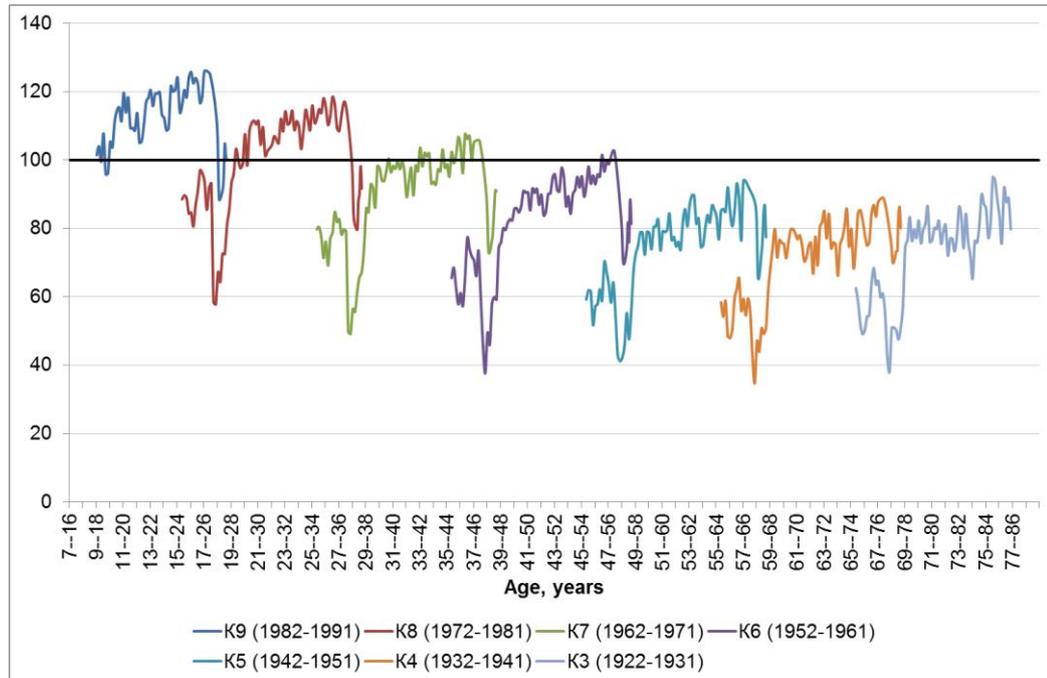
**Figure 3. Deviation dynamics of the CSI by cohort groups from the CSI values in the total sample, 1996–2009, annual average\***



\* Cohort K2 (1912-1921) is not presented due to low base rates in certain years.

Let us take a look at the CSI profiles by age in the context of cohorts—i.e., to the changes in consumer estimations and expectations that occurred as people of different ages became older (Figure 4). The index value of the younger cohorts during the entire research period remained higher than the threshold mark of 100 points, whereas their predecessors (people born from 1972–1981) became optimistic after turning 30. Obviously, in that case, the period effect should be taken into consideration—for example, the 25th birthday of people born in 1981 and 1971 fell on completely different years from the point of view of concrete historical conditions (2006 and 1996, respectively). Interestingly, despite the general similarity of the profiles, the curves that reflect the changes in age of the representatives of the three oldest cohorts remained in the same range of index values (whereas the ranges of the following generations differed). In other words, people who, on the initial date of the study (1996), were 45 or older were much more similar in their consumer sentiments than their younger contemporaries. It may be assumed that this finding is connected to differences in the level of adaptation of the cohorts to the changing environment—i.e., the differentiated socializing influence of the post-Soviet period on different generations.

**Figure 4. CSI profiles by age in the context of different cohorts, 1996–2009**



Based on these observations, the main hypothesis of the study can be formulated:

*H1. There is a significant cohort effect on consumer expectations, but the correlation is not linear—i.e., the increase in optimism/pessimism concerning the economic and social development of the country happens non-uniformly from one cohort to another.*

First of all, let us address the simple model of multiple regression in accordance with Formula 6 when only the numeric variable of age and the set of dichotomous variables representing cohort memberships are used as predictors. The oldest cohorts K1 (1902–1911) and K2 (1912–1921) were deleted due to their small sizes. The youngest cohort (K9, 1982–1991) was identified as the reference category. Stepwise regression was used.

**Regression model of the dependence of consumer sentiment on age and cohort**  
*(dependent variable—deviation in the values of the individual indices of consumer sentiment  
 from the aggregated CSI; N = 170,324; period—1996–2009)*

№ of model	R <sup>2</sup>	Independent variables	Unstandardized Coefficients		Standardized B	t-test	Sig.	Degree of multicollinearity	
			B	Standard error				VIF (variance influence factor) <sup>26</sup>	
1	<b>0.086</b>	(constant)	28.667	.243		117.769	.000		
		Age	-.660	.005	-.293	-126.586	.000	1.000	
8 <sup>27</sup>	<b>0.094</b>	(constant)	29.689	.387		76.670	.000		
		Age	-.566	.007	-.251	-77.345	.000	1.985	
		<i>Belonging to cohort (base—K9 [1982-1991])</i>							
		K8 (1972–1981)	-.964	.326	-.010	-2.961	.003	2.017	
		K7 (1962–1971)	-5.775	.304	-.057	-18.973	.000	1.720	
		K6 (1952–1961)	-8.270	.296	-.083	-27.982	.000	1.654	
		K5 (1942–1951)	-10.105	.340	-.085	-29.702	.000	1.542	
		K4 (1932–1941)	-7.947	.355	-.070	-22.356	.000	1.824	

The 8.6% deviation in the values of individual consumer sentiment indices from the aggregated index is explained by the age variable; however, the correlation is negative—i.e., with each year lived, optimism decreases 0.66 points (Table 3; Equation 1). When the cohort variable is included in the regression, the share of explained variance becomes higher—9.4% (for such a large amount of data, this value is rather good), which proves the significance of the cohort effect. Nonlinear correlation is observed—the most pessimistic cohort is that for the people born from 1942–1951: their value on the CSI is 10 points lower than the younger cohort. Then, the sixth cohort (born in 1952–1961) and the fourth cohort (born in 1932–1941) follow. The gap between these cohorts and the reference cohort is 8 points. People who were born from 1972–1981 and whose formative years took place in the post-Soviet era are close to their younger contemporaries in their level of optimism. People born from 1962–1971 are closer to older cohorts than to younger ones in their estimations and expectations. Most likely, this result is connected to the fact that such people, unlike younger people, do not actually find themselves acclimated to the new society and do not fully trust any self-actualization to occur in the future. Those in the initial or middle stages of their life-cycle (i.e., on average, being younger than 40) could not be satisfied with this situation.

<sup>26</sup> VIF—variance influence factor. If its value is close to 1, there is no multicollinearity for variable x.

<sup>27</sup> There is a total of 8 regression equations. The parameters of only the last one (№8) are presented in the table. Cohort 3 (1922–1931) is absent; the program eliminated it based on the stepwise regression method.

Here, it is appropriate to address Levada's research, which was dedicated to the analysis of the opinion dynamics of five "generation" groups (cohorts). The data demonstrate that the change in attitudes against the socio-economic reality occurs at the boundary of people born from 1965–1969 or 1960–1964 (Cohorts III and IV in Levada's work)<sup>28</sup>. For example, from 1993 to 1998, the "demonstrative nostalgia" about the past, which was reflected in the "rather general and consequently universally attractive form ('if everything remained the same as it had been...')", increased in all groups except for the younger one. The corresponding index increased in all cohorts starting from III (born in 1965–1969) and decreased noticeably only in Cohorts I and II (born in 1970–1979) [Levada 1999: 20-21]. Younger cohorts preferred the market economy (the value of the corresponding indicator being lower than 100), whereas people who were born in 1964 and earlier preferred the planned economy; moreover, such sympathy increased over five years. The positive attitude toward reforms in 1998 was demonstrated only by people who were 40 or younger [Levada 1999: 22]. In other words, people whose formative years occurred in the period of "stagnation" were the first generation to face the economic and political challenges of the resocialization of the 1990s.

Let us examine how significant the cohort effect is in the formation of consumer sentiments by including in the equation a wider range of socio-economic variables in accordance with Formula 6. In addition to age and cohorts, the following variables are used as predictors:

- gender (1—male; 0—female);
- higher education (yes/no);
- residence in Moscow and Saint-Petersburg (yes/no);<sup>29</sup>
- monthly income per capita (taken as a decile income group variable, where 1—group with lowest income; 10—group with highest income);<sup>30</sup> and
- employment status (1—working; 0—not working)<sup>31</sup>.

---

<sup>28</sup> See Table 3 in the Appendix.

<sup>29</sup> Experience shows that people who live in a megapolis are more sensitive and reactive to any economic or political changes in a country that reflect on the dynamics of consumer sentiments [Ibragimova, Nikolayenko 2005: 51]. This is why the indicator of "residence type" was taken as the variable that reflects living in one of two capitals.

<sup>30</sup> The preliminary testing of manner in which the CSI and income (measured as an aggregate of 10 dummy variables that reflected belonging to a decile group) correlated showed that it is linear albeit not directly proportional. That is why the addition of one variable that reflects the number of the decile group in a regression model is acceptable.

<sup>31</sup> Employment status in this case was based on self-identification—i.e., the response to the question "What is your current occupation?"

**Regression model of the dependence of consumer sentiments on socio-demographic characteristics**

*(dependent variable—deviation in the values of the individual indices of consumer sentiment from the aggregated CSI;  
N = 170,324; period—1996–2009, R<sup>2</sup> = 0.142)*

Independent variables	Unstandardized Coefficients		Standardized B	t-test	Sig.	Degree of multicollinearity
	B	Standard error				VIF (variance influence factor)
(constant)	11.288	.467		24.161	.000	
Age	-.542	.008	-.241	-70.643	.000	2.072
Monthly income per capita by decile groups	3.111	.034	.230	91.245	.000	1.131
Gender (male—1)	.754	.187	.010	4.022	.000	1.023
Higher education	-1.430	.446	-.008	-3.209	.001	1.028
Residence in Moscow or St. Petersburg	-.828	.337	-.006	-2.457	.014	1.069
Employment (working—1)	-.696	.220	-.009	-3.158	.002	1.425
<i>Belonging to cohorts (base—K9 [1982-1991])</i>						
K8 (1972–1981)	-1.592	.352	-.016	-4.525	.000	2.179
K7 (1962–1971)	-5.509	.337	-.055	-16.346	.000	1.994
K6 (1952–1961)	-8.100	.328	-.081	-24.676	.000	1.944
K5 (1942–1951)	-10.218	.356	-.087	-28.680	.000	1.637
K4 (1932–1941)	-6.980	.358	-.062	-19.502	.000	1.826

The proposed model explained 14.3% of variance. At the same time, the cohort variable remained significant (Table 4). The positive correlation between consumer optimism and the level of average income and gender was notable. Males were more optimistic than females; at the same time, as the analysis shows, the respondents were more optimistic about estimation of the current situation (i.e., about personal prosperity and the situation of consumer markets) than of expectations about the future [Ibragimova, Nikolayenko 2005: 42]. The influence of the income factor on consumer sentiments was much stronger than the influence of other socio-demographic characteristics: the respondent's transition from one decile group to a higher decile group increased optimism by 3.1 points. This pattern was also typical for consumers in developed countries: the higher the personal income, the higher the optimism in estimations of the present and the future.

Among all of the predictors that had a reverse correlation with the dependent variable, education had the highest coefficient (except the cohort variable, which will be examined separately). This meant that the existence of higher education reduced optimism 1.4 points on average, whereas living in capitals and the existence of work reduced optimism by 0.7 and 0.8 points, respectively. The explanation for this situation is the following: people with one or more of these characteristics usually have more information (as a result of their location). They can analyze the current economic situation more adequately due to the higher level of human capital. And, often, the economic situation is not very cheerful. As they participate in labor markets, they have real knowledge about production, unemployment, the dynamic of rates, and the economic situation in general.

Concerning the cohort variable, the nature of its dependence on the level of consumer optimism (as in the previous equation) remained the same—i.e., the inclusion of additional socio-demographic characteristics did not change the nonlinear character of the function; moreover, the coefficient's values remained almost unchanged. Speaking of cohorts, the special position of people who were born from 1962–1971 was maintained—they were closer in their sentiments to the older cohort than to their younger contemporaries. Undoubtedly, every generation is unique; however, this one was different because these people were almost fully socialized (e.g., through graduation from school, enrollment in the army, matriculation into the university, joining the workforce) in the Soviet period, whereas their adult lives took place in the post-Soviet period. Therefore, they were forced to find a place in the new, changing world. The 1990s were a risky period of time: on one hand, fantastic careers were possible; on the other hand, dramatic falls were also plausible. Of course, everyone was adapting to the new environment, but for this generation, it was more challenging because of the point at which they found themselves in their life-cycles. Actually, not only was there the necessity for adaptation but also for resocialization—a new self-actualization for the new reality.

The absence of the cohort of people who were born from 1922–1931 after running the stepwise regression (in the first and second models) is rather interesting. They were similar in their level of consumer optimism to the reference cohort—in our case, the reference cohort was the youngest cohort (1982–1991). To prove this assumption, an additional regression model was built for which the cohort of 1952–1961 was identified as the reference group. This choice was determined by the fact that the estimations and expectations of this cohort were the closest to the “average” level—i.e., the value of the CSI in the total sample. As shown in Table 4 (see the Appendix), the coefficients of the variables that reflected belonging to the oldest cohort (1922–1931) and to the youngest cohort (1982–1991) were almost equal when standard errors were taken into account. This means that, in their consumer optimism (with respect to the reference cohort), the representatives of the war generation and the “next generation” are very close—i.e., in their estimations of the current reality and expectations for the future, grandparents are more similar to their grandchildren than they are to their children. This fact is very intriguing and prompts us to think about the process of generation change and about the character of the events they experienced in the process of socialization—i.e., the connection to historical process.

The discussion around this problem has been ongoing for several centuries. The starting point of this discussion is the question of which comes first: the biologically based genealogical-generational change or external events and circumstances. In the majority of the works from the

second half of the 19<sup>th</sup> century, the change of generations was seen as a driving force of historical process—i.e., as an initial factor [A. Comte, J. Mill]. The alternative point of view, which states that generational change is a consequence of historical events, was first formulated by the German philosopher, W. Dilthey, in his works published in the 1860s–1870s [Savel'eva, Poletayev 1997: 364-365]. Later, this hypothesis was developed by Mannheim—he treated the generation as a community that reflects the different stages of people's lives from the point of view of socialization and the existence of certain socio-cultural characteristics. The consensus that was reached after the Second World War tells us that “the overwhelming majority of researchers think that a generation is formed by events, i.e., is a derivation of historical changes. At the same time, once established, a social generation determines the characteristics of a certain historical period, i.e., becomes the initial factor of the historical process” [Savel'eva, Poletayev 1997: 366]. However, the question concerning the “lifetime” of a generation and the cycles that are connected to it is still open. In the literature, the widespread cycle is the one that consists of two generations and the never-ending conflict of parents and children. However, a number of historians operate under the assumption that the cycle consists of four generations. That said, as Savel'eva and Poletayev note, “by the middle of the twentieth century the understanding was formed that systematical division of the historical process on generation-intervals is not correct from the scientific point of view” [Savel'eva, Poletayev 1997: 370]. However, the idea of cyclicity is still popular among researchers. In the 1990s, the theory of generation became popular not only in academic circles but also in the practically oriented circles that were developed by Howe and Strauss in their second book “The Fourth Turning” [1997].

The key idea of this theory is that every society in its history goes through alternate periods of crisis and progress followed by the change of generations, and each generation is distinguished by its values and patterns. Based on the analysis of American society from the time of Columbus, the authors define four archetypes, calling them “prophet,” “nomad,” “hero” and “artist” [Strauss, Howe 1997: 105]. One of the reasons why these archetypes are repeated is that the “young generation tries to correct or compensate for those characteristics of the older generation, which they see as excessive among the people of middle age who hold power” [Isaeva 2011: 292]. The idea is rather sketchy and contingent (it is doubtful that these archetypes will remain permanent over time), and the idea of this development is not new but gives food for thought.

People who were born in the first part of the interval 1922-1931 are a generation of heroes (in the terms of Strauss and Howe—“heroes”) who have endured through history as a result of their collective military triumph. For them, life is a continuous struggle for creation and the belief in a “bright future” is unbeatable (this is connected to the terms of their socialization). Based on their level of optimism, as mentioned earlier, they are close to the youngest cohort (born 1982-1991)—the representatives of the “next generation,” the “millennium generation,” “Generation Y.” They grew up in the period of technology, and so their distinctive features are contact with social media, an inclination towards team games, despite the existence of virtual reality because the network (as Howe notes) is their way of creating community. ““Generation Millennium” has turned inside out the social aim of information technologies to possess again a sense of community, of group... They are always under each other's scrutiny. However, the need for community makes them willing to pay these costs. They are very young and operate according to instincts that tell them. They aim at consensus and solidarity...want to build and not destroy”

[Al’bats 2011]. Given the weakening of social institutions and the strengthening of crisis events in the economy, the national restoration of “heroes” will be needed again—and “Generation Y” (in the opinion of the coordinator of the project “Theory of generations in Russia-Rugenerations”, E. Shamis) “could become heroes for other generations, despite the fact that sometimes they do not want to be heroes” [Sokolova 2010]. It is not accidental that one of the tendencies of modernity is the appearance and activity of youth movements within the political and social context. However, it is rather early to speak about the features of this generation, as they have not even reached age 30 in the last year of the period studied.

In this study, I have tried to implement another approach to the definition of cohorts by analyzing the influence of the important social events that people lived through during their lifetime. For that purpose, a set of dichotomy variables was made, which, in their chronological order, reflect every year of a person’s life. The value of the variable is 1 if a respondent was 15 or older in the given year (that is why the initial year is 1937, i.e., the year when people who were born in 1922 became 15 years old<sup>32</sup>). However, the year of the survey is also taken into consideration (for example, if the survey was conducted in 1997, the following years were not lived yet). There are 70 variables (from 1937 to 2008) that were added to the regression model along with the socio-demographic characteristics. Obviously, in this case, the cohort variable was excluded. When the stepwise regression was executed, many year-variables were automatically deleted (based on sig testing). There were 18 variables remaining, but some of them were “paired” due to high multicollinearity. In that case, the years (variables) that appeared first in the equation of the stepwise regression (usually such variables have higher coefficients) were left for further analysis.

As a result, we have the following model (see Table 5).

Table 5

**Regression model of dependence of consumer sentiments from socio-demographic characteristics and experienced events**

*(dependent variable—deviation in values of individual indices of consumer sentiment index from aggregated CSI;*

*N = 170324; period—1996-2009, R<sup>2</sup> = 0,143)*

Independent variables	Unstandardized Coefficients		Standardized B	t-test	Sig.	Degree of multicollinearity
	B	Std. error				VIF (variance influence factor)
(constant)	12.468	.619		20.133	.000	
Age	-.648	.025	-.288	-25.700	.000	22.418
Monthly income per capita by decile groups	3.105	.034	.229	91.109	.000	1.131
Gender (male—1)	.760	.187	.010	4.056	.000	1.024

<sup>32</sup> The years survived during childhood were not taken into consideration due to our conceptual assumption.

Higher education	-1.646	.452	-.009	-3.645	.000	1.057
Residence in Moscow or Saint	-.825	.337	-.006	-2.449	.014	1.069
Employment (working—1)	-.562	.220	-.007	-2.550	.011	1.428
<i>Experienced events at the age of 15 and older</i>						
1939	5.307	.873	.016	6.080	.000	1.226
1945	3.831	.632	.026	6.060	.000	3.292
1948	3.602	.618	.029	5.830	.000	4.378
1953	2.512	.504	.025	4.981	.000	4.442
1958	2.601	.492	.029	5.286	.000	5.351
1967	-1.240	.421	-.015	-2.945	.003	4.873
1973	-1.012	.400	-.013	-2.528	.011	4.705
1982	-1.984	.444	-.024	-4.469	.000	5.227
1986	-1.949	.453	-.022	-4.305	.000	4.779
2005	.743	.265	.008	2.810	.005	1.438

The following findings are interesting. 1) The positive values of the first five-year variables (1939-1958) are observed. Then, there is a sharp decrease, and the values become negative. The restoration of a positive connection to the dependent variable occurs in 2005. All this means that people who survived the events in 1939-1958 at the age of 15 or older (i.e., born 1924-1943) are higher in their consumer positive level than the following cohorts. 2) The maximum positive influence on people's estimations concerning the present and future have the years that are somehow connected with the war period of our history: 1939—the expansion of western borders, the beginning of the Second World War, the Soviet-German non-aggression pact, the Soviet-Finnish war; 1945—victory in the Great Patriotic war; and 1948—it is difficult to pick an important event, but the entire atmosphere of this period was connected with the “Cold War.” 3) Among the years that have a negative influence on the level of consumer optimism, 1982 and 1986 stand out. The first is associated with the period of “stagnation” and Brezhnev's death, and the second with the beginning of a new period known as “*perestroika*.” 4) Of the entire post-Soviet period, only the year 2005 is in the regression model and has a positive coefficient. This is not surprising. Based on many factors, this year was very significant—for example, in the sphere of personal income of the population, the 1991 level (in real terms) was reached, the GDP volume became equal to the value of the pre-reform years, etc.<sup>33</sup>

Based on the closeness of variable values that reflect the effect of the years one has lived through (at age 15 and older) on the level of consumer optimism, it is possible to empirically extract the generations as a “form of social connection and the focus of symbolic solidarity of acting individuals” [Dubin 2005: 63]. In this notion, Dubin's definition of “generation” is actually focused on a sociological interpretation and is considered as a group of people who were born at

<sup>33</sup> See: Mode of life and living standards of Russian population in 1989–2009 [Text]: rep. at “XII Intern. acad. conf. on economic and social development”, Moscow, 5–7 April, 2011 / G. Andrushchak, A. Burdijak, V. Gimpelson et al. ; gen. sci. supervis. E. G. Yasin ; Nat. Res. Univ. Higher School of Economics. — M. : HSE Publ. House, 2011. (in Russian). Pp. 10-12

the same time and had the same life experiences, orientations and sentiments. This is the component that separates (as Dubin said) the understanding of this notion from the demographic notion “cohort” as “people who were born at the same time and arranged the structure of the population” [Semenova 2005: 81]. In other words, not only is the time localization important but so the “historical localization” (Mannheim) of community. That is why an approach to the differentiation of generations based not on age differences but on the correlation with historical events or processes is considered defensible: “naturally, the boundaries between such relative generations will be unfixed, but the main criteria are the effects of the historical events on the majority of the generation born during the specific decades” [Semenova 2005: 83]. It is important to note that in this study, I did not focus my attention on the analysis of each generation’s specificity but rather I only paid attention to the one component concerned with economic sentiments.

The first observed generation was organized by the events of 1939-1948, which had a positive influence on their level of optimism (if these years were survived at the age of 15 or older). Consequently, these are people who were born from 1922-1933.<sup>34</sup> Based on the “historical localization of the life experience” of these individuals, Semenova called them the “near war” generations, who had experienced hard times but stayed loyal to communist ideals and who were distinguished by their attitude towards the “Homeland” (i.e., here she is speaking about the substitution of the power symbol “state” for the symbol “Homeland” as a construct of mass consciousness). They also identified themselves as a social whole [Semenova 2005: 94]. However, the time boundaries of this generation are, according to Semenova, wider—from the 1920s to the first half of the 1940s [Semenova 2005: 88]. Golovin has called this generation the “Defenders of the Homeland” and attributed to them the cohort born from 1919–1933, noting the level of their political integrity [Golovin 2004: 133-134].

The next generation was organized around the events from the 1950s to the first half of the 1960s (the years 1953 and 1958, within this period, were included in the regression model from this period and with positive sign). Consequently, these are people who were born from 1934–1951<sup>35</sup>—i.e., those who survived war in their childhoods (only half of the cohorts within this generation) and whose socialization mostly took place in the period of the “Thaw.” On the one hand, they were “less affected by the existential fear of the war years and were affected to an even smaller extent by Stalin’s disciplinary society” [Golovin 2004: 135]. On the other hand, this generation was more differentiated inwardly—“fragmentary in its social experience...the most mentally active and conscious of itself, its place in society and society in general” [Semenova 2005: 99]. The influence of the events experienced in the formative years on the level of consumer sentiments was positive. However, this optimism is more “quiet” compared to that of previous generations.

The third observed generation was organized around the events from the second half of the 1960s to the 1970s and combined the cohorts born in 1952–1966. Many researchers have called them the generation of “stagnation.” However, the time boundaries of the cohorts within this generation could differ slightly. Levada defines this generation as the people who were born

---

<sup>34</sup> The older people (older than those born in 1922) are probably in this generation. However, in our sample, their share of representation was extremely low, so it was difficult to observe anything.

<sup>35</sup> It is difficult to define the upper limit—the only obvious observation is that people who were 15 in 1967 are not in this generation (based on the coefficients of the regression model).

from the middle of the 1940s to the end of the 1960s (1944-1968) [Levada 2005: 44]. For Golovin, these were the people born 1953–1964 [Golovin 2004: 144]. The most prominent characteristic of the time when the socialization of this generation took place is most likely the expression “no changes.” It is no surprise, then, that the influence of this historical period on the level of consumer optimism of the people who lived through it in their formative years is negative. However, it is less negative than that of the following historical period.

The new historical reality of the “reformation” period corresponded to the generation that combined the people born from 1967–1972 (these boundaries were defined based on the closeness of the variables’ coefficients, which reflected the survived years from the age of 15). The childhoods of these people took place in the quiet and—to some extent—socially protected period of “stagnation,” and their most important years of youth and early adulthood occurred in the “reformation” period. In other words, in the life experiences of these people, “comparison will be always a semantic core” [Semenova 2005: 100]. Based on the analysis of the lexical forms of a generation’s self-presentation (i.e., the free speech of generation representatives concerning their generation), Semenova came to the conclusion that this generation had symptoms of early disappointment and nostalgia for the past. “At the level of the collective consciousness, the goals of personal (or collective) movement were not formed. This led to the early psychological crisis. And as a result, there was a return to the more understandable goals of the past” [Semenova 2005: 102]. At the same time, people of this generation were active and enterprising, having adapted rather well to the changed environment and having achieved a certain success in life. However, sometimes they “do not understand what they are fighting for and what the result will be” [Semenova 2005: 102]. Most likely, the negative influence of the years lived during the period of their socialization toward consumer sentiment could be explained by this sense of loss.

Year 2005 alone represents the following years in the regression model. Moreover, the influence of this year on the dependent variable was positive, and the difference in the values of the unstandardized coefficients and the previous year-variable was rather significant (2.7 points). This allows us to speak about the new generation of people who were born from the mid-1980s to the early 1990s. In the literature, they are called the “generation of relative stabilization” (Golovin) or the “post-reformational generation” (Semenova), whose socialization took place during the successful period of the 2000s. They have “clear views about the goals of their social activities as being constructive, independent work aimed at personal success and prosperity,” an “orientation towards hedonism and emancipation,” an “active patriotism instead of a passive “love and devotion,” and a goal mindedness that distinguished people from that generation [Semenova 2005: 104].

The question arises about the people who were born in the period from 1973 to the first half of the 1980s, whose years of active socialization were not included in the regression model (from the late 1980s to the 1990s). Currently, the reasons for this omission are not fully understood. However, it is obvious that these are people whose personality formations took place during the post-Soviet crisis of social transformation. They are mostly devoted to market economy principles and economic competition, and the Soviet past is not significant to them [Levada 2005: 59].

### *Conclusion*

The main aim of the present study was to reveal the influence of cohort effects on consumer sentiments. By the term ‘cohort effect’, I meant the differences in the conditions of socialization and people’s life experience, which is accumulated on a mass level. The research demonstrates that belonging to a cohort actually significantly determines consumer sentiments. However, the nonlinear correlation describing such dependence showed that an increase of optimism/pessimism concerning the economic and social development of the country happens non-uniformly from one cohort to another.

Regression analysis demonstrated that the most pessimistic cohort (controlling for other socio-demographic factors) was the group of people who were born in 1942–1951, whereas the representatives of the oldest cohort in the sample (born 1922—1931) were much more optimistic. Therefore, in its estimations of current reality and expectations for the future, the oldest cohort is more similar to their grandchildren than to their children. The special position of people born in 1962–1971 is also revealed. They were almost fully socialized (e.g., having graduated from school, joined the army, attended the university, or begun work) in the Soviet period, whereas their adult lives took place in the post-Soviet period. The estimations and expectations of these people are closer to the conterminous older cohort than to the younger one.

At the beginning of the paper, I spoke about theoretical approaches to the problem of generations and the complications with its empirical differentiation. The inclusion of variables that reflect the years people lived (at age 15 and older) in chronological order as predictors in a regression model makes it possible not only to reveal the influence of historical events on consumer sentiment formation but also to define the time boundaries of the generations. Initially, that was not the purpose of the study. However, the research shows that an indicator such as the CSI could be one instrument for solving this problem. Further analysis could be dedicated to the verification of the revealed generations’ boundaries by including additional indicators and the analysis of a generation’s patterns by using different sociological data (both quantitative and qualitative), historical evidence, and other resources.

**Results of the regression equations estimating the aggregated Consumer Sentiments Index (seasonally smoothed variables)**

	<b>Equation 1</b>	<b>Equation 2</b>	<b>Equation 3</b>
<b>Period of estimation</b>	<b>01.1997– 06.2010</b>	<b>01.1997– 06.2004</b>	<b>07.2004– 06.2010</b>
<b>Independent variables</b>	Coefficient/ t-statistic	Coefficient/ t-statistic	Coefficient/t- statistic
Constant	<b>110.3</b> 86.5	<b>107.4</b> 54.8	<b>103.6</b> 28.4
Proportion of the official number of unemployment to the number of registered free spaces	<b>-4.72</b> -12.0	<b>-4.51</b> -9.9	<b>-7.04</b> -5.8
Output of 5 base sectors, 12-month growth rate	<b>0.84</b> 9.0	<b>0.56</b> 3.9	<b>1.36</b> 17.8
Index of consumer rates, 12-month growth rate	<b>-0.34</b> -14.2	<b>-0.30</b> -12.8	<b>0.72</b> 3.5
R <sup>2</sup> DW (Darbin-Watson coefficient)	<b>0.826</b> 0.4	<b>0.856</b> 0.6	<b>0.885</b> 1.2

Table 2

**Results of the regression equations estimating the index of changes in consumer's financial position (seasonally smoothed variables)**

	<b>Equation 1</b>	<b>Equation 2</b>	<b>Equation 3</b>
<b>Period of estimation</b>	<b>01.1997– 06.2010</b>	<b>01.1997– 06.2004</b>	<b>07.2004– 06.2010</b>
<b>Independent variables</b>	Coefficient/ t statistic	Coefficient/ t statistic	Coefficient/ t statistic
Constant	<b>66.5</b> 56.4	<b>60.9</b> 49.6	<b>79.26435</b> 36.5
Real personal disposable income per capita, 12-month growth rate	<b>1.37</b> 14.4	<b>1.34</b> 14.7	<b>0.732</b> 3.7
R <sup>2</sup> DW (Darbin-Watson coefficient)	<b>0.565</b> 0.4	<b>0.712</b> 0.6	<b>0.161</b> 0.3

<sup>36</sup> The regression models in Tables 1–2 were estimated by S. Nikolaenko.

Table 3

**Dynamics of social attitudes in 5-year cohorts \***

Five-years cohorts**	Do you agree that it would be better...like before 1985? index***			Plan or market? Which economic system do you think is better? index****			Should reforms be continued? index*****		
	1993 year	1998 year	change	1993 year	1998 year	change	1993 year	1998 year	change
I 1975–1979 birth years (K8)	98	81	-17	77	82	+5	110	129	+19
II 1970–1974 birth years (K7, K8)	96	80	-16	59	67	+8	137	124	-13
III 1965–1969 birth years (K7)	80	110	<b>+30</b>	89	76	-7	138	104	-34
IV 1960–1964 birth years (K6, K7)	88	98	<b>+10</b>	94	110	+16	137	101	-36
V 1955–1959 birth years (K6)	97	119	<b>+22</b>	95	104	+9	129	105	-24
VI 1950–1954 birth years (K5, K6)	89	106	<b>+17</b>	102	121	+19	139	89	-50
VII 1945–1949 birth years (K5)	128	121	-7	109	136	+27	125	92	-33
VIII 1940–1944 birth years (K4, K5)	129	140	<b>+11</b>	135	144	+9	109	86	-23
IX 1935–1939 birth years (K4)	127	140	<b>+13</b>	121	155	+34	116	76	-40
X 1930–1934 birth years (K3, K4)	136	150	<b>+14</b>	125	118	-7	104	67	-37
XI 1925–1929 birth years (K3)	131	139	+8	119	154	+35	109	81	-28

\* Source: [Levada 1999: 21]

\*\* Levada marked some of these with Roman numerals; others, he left in brackets. They represented the number of cohorts in this research.

\*\*\* Index= “agree” (%)—“disagree” (%) +100

\*\*\*\*Index=% that prefers a planned economy; otherwise—a % of the prefer market economy +100

\*\*\*\*\* Index= “continue” (%)—“stop” (%) +100

**Regression model of the dependence of consumer sentiments on socio-demographic characteristics.**

*(dependent variable—the deviation in values of the individual indices of consumer sentiment from the aggregated CSI;*

*N = 170,324; period—1996–2009, R<sup>2</sup> = 00142)*

Independent variables	Unstandardized Coefficients		Standardized B	t-test	Sig.	Degree of multicollinearity
	B	Std. error				VIF (variance influence factor)
(constant)	3.526	.997		3.537	.000	
Age	-.550	.021	-.244	-26.377	.000	15.278
Monthly income per capita by decile groups	3.111	.034	.230	91.245	.000	1.131
Gender (male–1)	.753	.188	.010	4.017	.000	1.023
Higher education	-1.460	.452	-.008	-3.229	.001	1.058
Residence in Moscow or St. Petersburg—not the most conducive for predicting happiness.	-.827	.337	-.006	-2.456	.014	1.069
Employment (working—1)	-.689	.221	-.009	-3.118	.002	1.434
<i>Belonging to cohorts (base—K9 (1982–1991))</i>						
K9 (1981–1991)	7.876	.663	.058	11.870	.000	4.189
K8 (1972–1981)	6.360	.512	.063	12.413	.000	4.620
K7 (1962–1971)	2.518	.365	.025	6.890	.000	2.344
K5 (1942–1951)	-2.047	.390	-.017	-5.246	.000	1.963
K4 (1932–1941)	1.270	.535	.011	2.373	.018	4.083
K3 (1922–1931)	8.346	.712	.061	11.717	.000	4.800

## References

- Abramson P. R. (2011) Critiques and Counter-Critiques of the Postmaterialism Thesis: Thirty-four Years of Debate. *CSD Working Papers*, Center for the Study of Democracy, UC Irvine. Available at: <http://escholarship.org/uc/item/3f72v9q4> (accessed on 3 May 2014).
- Adams F. (1964) Consumer Attitudes, Buying Plans, and Purchases of Durable Goods: A Principal Components, Time Series Approach. *The Review of Economics and Statistics*, vol. 46, no 4, pp. 347–355.
- Al'bats E. (2011) Oni vyrosli v tsinichnoy srede. Istorik Neyl Khouv — The New Times [They Grew Up in the Cynical Environment. Neil Howe, a Historian]. *The New Times*, no 02 (197). 24 January. Available at: <http://newtimes.ru/articles/detail/33302> (accessed on 3 May 2014) (in Russian)
- Andrushchak G. V., Burdyak A. Ya., Gimpel'son V. E., et al. (rukovoditel' avtorskogo kollektiva Yasin E. G.). *Uroven' i obraz zhizni naseleniya Rossii v 1989–2009 godakh* [The Level of Welfare and Way of Life of Russian Population in 1989–2009 years]: doklad k XII Mezhdunar. nauch. konf. po problemam razvitiya ekonomiki i obshchestva, Moskva, 5–7 April 2011. Moscow: HSE Publishing House (in Russian).
- Attanasio O. P. (1998) Cohort Analysis of Saving Behavior by U.S. Households. *The Journal of Human Resources*, vol. 33, no 3, Summer, pp. 575–609.
- Baghestani H. (1992) Survey Evidence on the Muthian Rationality of Inflation Forecasts of US consumers. *Oxford Bulletin of Economics and Statistics*, May, pp. 173–186.
- Baltes P. (1987) Theoretical Propositions of Life-Span Developmental Psychology: On the Dynamics Between Growth and Decline. *Developmental Psychology*, vol. 2.1, no 5, pp. 611–626.
- Baltes P. B., Reinert G. (1969) Cohort Effects in Cognitive Development of Children as Revealed by Cross-Sectional Sequences. *Developmental Psychology*, vol. 1, no 2, pp. 169–177.
- Blossfeld H.-P. (1986) Career Opportunities in the Federal Republic of Germany: A Dynamic Approach to the Study of Life-Course, Cohort, and Period Effects. *European Sociological Review*, vol. 2, no 3, December, pp. 208–225.
- Brim O. G., Jr. (1966) Socialization through the Life-Cycle. *Socialization after Childhood: Two Essays* (eds. O. G. Brim, Jr., S. Wheeler), New York: Wiley, pp. 1–49.
- Brim O. G., Jr., Kagan J. (1980). Constancy and Change: A View of the Issues. *Constancy and Change in Human Development* (ed. by O. G. Brim, Jr., J. Kagan), Cambridge, MA: Harvard University Press, pp. 1–25.
- Carroll C. (2003) Macroeconomic Expectations of Households and Professional Forecasters. *The Quarterly Journal of Economics*, vol. 118, no 1, pp. 269–298.
- Carroll C., Dunn W. (1997) Unemployment Expectations, Jumping (S, s) Triggers, and Household Balance Sheets. *NBER Macroeconomics Annual* (eds. B. S. Bernanke, J. Rotemberg), vol. 12, pp. 165–230. Available at: <http://www.nber.org/chapters/c11039.pdf> (accessed on 27 February 2014).

- Carroll C., Fuhrer J., Wilcox D. (1994) Does Consumer Sentiment Forecast Household Spending? If So, Why? *The American Economic Review*, vol. 84, no 5, pp. 1397–1408.
- Curtin R. (2000) *The Structure of Consumer Confidence: Comparisons between the United States and Russia*. Available at: <http://www.sca.isr.umich.edu/fetchdoc.php?docid=24781> (accessed on 27 February 2014).
- Curtin R. (2002) *Surveys of Consumers: Theory, Methods, and Interpretation*. NABE 44th Annual Meeting, September 30, 2002, Washington, DC. Available at: <http://www.sca.isr.umich.edu/fetchdoc.php?docid=26396> (accessed on 3 May 2014). *Economic Sociology*. Vol. 15. No 3. May 2014 [www.ecsoc.hse.ru](http://www.ecsoc.hse.ru) 65
- Curtin R. (2003) Unemployment Expectations: The Impact of Private Information on Income Uncertainty. *Review of Income and Wealth*, vol. 49, no 4, pp. 539–554.
- Curtin R. (2010) Inflation Expectations: Theoretical Models and Empirical Tests. *Inflation Expectations* (ed. P. Sinclair), London: Routledge, pp. 34–36.
- Dalton R. (1977) Was There A Revolution?: A Note on Generational Versus Life Cycle Explanations of Value Differences. *Comparative Political Studies*, vol. 9, no 4, pp. 459–473.
- Das M., Soest A. van. (2000) *Expected Versus Realized Income Expectations: A Test of the Rational Expectations Hypothesis*. Available at: <http://fmwww.bc.edu/RePEc/es2000/1750.pdf> (accessed on 27 February 2014).
- Deaton A., Paxson C. (1994) Saving, Aging, and Growth in Taiwan. *Studies in the Economics of Aging* (ed. D. Wise), Chicago: University of Chicago Press, pp. 331–362.
- Dubin B. (1995a) O pokolencheskom mekhanizme sotsial'nykh sdvigov [On Generational Mechanism of Social Shifts]. *Kuda idet Rossiya? Al'ternativy obschestvennogo razvitiya* [Where is Russia Going? Alternatives for Social Development] (ed. T. I. Zaslavskaja), Moscow: Aspekt-Press, pp. 237–247 (in Russian).
- Dubin B. (1995b) Sotsial'ny status, kul'turny kapital i razry v pokolenii [Social Status, Cultural Capital and the Generation Gap]. *The Russian Public Opinion Monitor*, vol. 1, pp. 12–16 (in Russian).
- Dubin B (2005). Pokolenie: smysl i granicy ponjatija [Generation: the meaning and limitations of the concept] In: Levada Yu., Shanin T. (eds) *Otsy i deti: pokolencheskii analiz sovremennoi Rossii* [Daddies and Children: A Generational Analysis of Contemporary Russia], Moscow: New Literary Review, pp. 61–79 (in Russian).
- Easaw J., Garratt D., Heravi S. (2005) Does Consumer Sentiment Accurately Forecast UK Household Consumption? Are There Any Comparisons To Be Made With The US? *Journal of Macroeconomics*, vol. 27, pp. 517–532.
- Giuliano P., Spilimbergo A. (2013) Growing up in a Recession. *The Review of Economic Studies* (Advance Access published December 25, 2013). Available at: <http://restud.oxfordjournals.org/content/early/2013/12/25/restud.rdt040.full.pdf> (accessed on 3 May 2014).
- Glenn N. (1980) Values, Attitudes and Beliefs. Constancy and Change in Human Development (eds. O. G. Brim, Jr., J. Kagan), Cambridge, MA: Harvard University Press, pp. 596–640.

- Glenn N. (2005) *Cohort Analysis*. 2nd rev. ed., Thousand Oaks, CA: SagePublications (Quantitative Applications in the Social Sciences Series).
- Glotov M. (2004) Pokoleniye kak kategoriya sociologii [Generation as a Sociological Category]. *Sotsiologicheskie issledovaniya*, vol. 10, pp. 42–49 (in Russian).
- Golovin N. (2004) *Teoretico-metodologicheskie osnovy issledovaniya politicheskoi sotsializatsii* [Theoretical and Methodological Foundations of Studies in Political Socialization], Saint-Petersburg: St.-Petersburg State University (in Russian). *Economic Sociology*. Vol. 15. No 3. May 2014 [www.ecsoc.hse.ru](http://www.ecsoc.hse.ru) 66
- Grant A. P., Thomas L. B., Jr. (1999) Inflationary Expectations and Rationality Revisited. *Economic Letters*, vol. 62, pp. 331–338.
- Halvorsen E. (2003) *A Cohort Analysis of Household Saving in Norway*. Discussion Papers No. 354, August 2003 Statistics Norway, Research Department, Available at: <http://www.ssb.no/a/publikasjoner/pdf/DP/dp354.pdf> (accessed on 27 February 2014).
- Heckman J., Robb R. (1985) Using Longitudinal Data to Estimate Age, Period and Cohort Effects in Earnings Equations. *Cohort Analysis in Social Research* (eds. W. M. Mason, S. E. Fienberg), New York: Springer, pp. 137–150.
- Heim J. (2010) The Impact of Consumer Confidence on Consumption and Investment Spending. *The Journal of Applied Business and Economics*, vol. 11, no 2, August, pp. 37–54.
- Howrey P. (2001) The Predictive Power of the Index of Consumer Sentiment. *Brookings Papers on Economic Activity*, vol. 1, pp. 175–216.
- Ibragimova D. Kh. (2014) Kogortnyy analiz potrebitel'skikh ozhidaniy naseleniya Rossii (1996–2010): teoretiko-metodologicheskie osnovy issledovaniya [Cohort Analysis of Consumer Expectations of Russian Population (1996–2010): Theoretical and Methodological Backgrounds]. *Economic Sociology*, vol. 15, no 2, pp. 99–118. Available at: [http://ecsoc.hse.ru/data/2014/03/31/1317148973/ecsoc\\_t15\\_n2.pdf#page=99](http://ecsoc.hse.ru/data/2014/03/31/1317148973/ecsoc_t15_n2.pdf#page=99) (accessed on 19 May 2014) (in Russian).
- Ibragimova D., Nikolayenko S. (2005) *Index potrebitel'skikh nastroyenii* [Consumer Sentiment Index], Moscow: Pomatur (in Russian).
- Inglehart R. (1990) *Culture Shift in Advanced Industrial Society*. Princeton: Princeton University Press.
- Inglehart R. (1997) Postmodern: menzyushchiesya tsennosti i izmenyayushchiesya obshchestva [Postmodern: Changing Values and Evolving Societies], *Politicheskie issledovaniya*. no 4, pp. 6–32 (in Russian).
- Isaeva M. (2011). Pokoleniya krizisa i pod'ema v teorii V. Shtrausa i N. Houva [Generation Crisis and the Rise in Theory W. Strauss and N. Howe]. *Znanie. Ponimanie. Umenie* [Knowledge. Understanding. Skills], vol. 3, pp. 290–295 (in Russian).
- Juster T., Wachtel P. (1972) Anticipatory and Objective Models of Durable Goods Demand. *The American Economic Review*, vol. 62, no 4, pp. 564–579.
- Kapteyn A., Alessie R., Lusardi A. (2005) Explaining the Wealth Holdings of Different Cohorts: Productivity Growth and Social Security. *European Economic Review*, vol. 49, no 5, July, pp. 1361–1391.

- Katona G. (1951) *Psychological Analysis of Economic Behaviour*. New York: McGraw-Hill.
- Katona G. (1968) Consumer Behavior: Theory and Findings on Expectations and Aspirations. *The American Economic Review*, vol. 58, no 2. Papers and Proceedings of the Eightieth Annual Meeting of the American Economic Association (May), pp. 19–30.
- Katona G. (1975) *Psychological Economics*. New York: Elsevier. *Economic Sociology*. Vol. 15. No 3. May 2014 [www.ecsoc.hse.ru](http://www.ecsoc.hse.ru) 67
- Kesel'man L., Matskevich M. (1998) Mezhheneratsionnyy sdivg individual'nogo optimizma/pessimizma v sovremennom rossiiskom obschestve [The Intergenerational Shift of Individual Optimism/Pessimism in Contemporary Russian Society]. *Zhurnal sotsiologii i sotsial'noy antropologii*, vol. 1, no 2, pp. 113–120 (in Russian).
- Kurennoy V. (2014) Ot 1990-kh k 2000-m: puti i put' [From the 1990s toward the 2000s: Ways and the Way]. Novaya diskussiya na «Geftere» filsofa i publitsista Borisa Mezhueva i kul'turologa, filsofa Vitaliya Kurennoho. *Geftere*. 05.02. Available at: <http://gefter.ru/archive/11257> (accessed on 3 May 2014) (in Russian).
- Kwan A., Cotsomitis J. (2004) Can Consumer Attitudes Forecast Household Spending in the United States? Further Evidence from the Michigan Survey of Consumers. *Southern Economic Journal*, vol. 71, no 1, July, pp. 136–144.
- Lahiri K., Zhao Y. (2013) *Determinants of Consumer Sentiment: Evidence from Household Survey Data*. Discussion Papers from University at Albany, SUNY, Department of Economics. Available at: <http://EconPapers.repec.org/RePEc:nya:albaec:13-12> (accessed on 27 February 2014).
- Levada Yu. (1999) Pyatiletnie gruppy — pyatiletnie sdvigi (opyt retrospektivnogo analiza) [Five-Year Groups — the Five-Year Changes (A Retrospective Analysis)]. *The Russian Public Opinion Monitor*, vol. 2, pp. 19–24 (in Russian).
- Levada Yu. (2000) Chelovek prisposoblenny [Adapted Human]. Levada Yu. *Ot mnenii k ponimaniyu: sociologicheskie ocherki 1993–2000* [From Opinion toward Understanding: Sociological Essays 1993–2000], Moscow: Moscow School of Political Research, pp. 467–488 (in Russian).
- Levada Yu. (2005) Pokoleniya 20-go veka: vozmozhnosti issledovaniya [Generations of the 20th Century: Possibilities for Studying]. *Otsy i deti: pokolencheskii analiz sovremennoi Rossii* [Daddies and Children: A Generational Analysis of Contemporary Russia] (eds. Yu. Levada, T. Shanin), Moscow: New Literary Review; pp. 39–60 (in Russian).
- Levada Yu., Shanin T. (eds) (2005). *Otsy i deti: pokolencheskii analiz sovremennoi Rossii* [Daddies and Children: A Generational Analysis of Contemporary Russia], Moscow: New Literary Review (in Russian).
- Ludvigson S. (2004) Consumer Confidence and Confidence Spending. *Journal of Economic Perspectives*, vol. 18, no 2, pp. 29–50.
- Mannheim K. (1952) *The Problem of Generations: Essays on the Sociology of Knowledge*, New York: Oxford University Press, pp. 276–321.

- Mason K. O., Mason W. M., Winsborough H. H., Poole K. W. (1973) Some Methodological Issues in Cohort Analysis of Archival Data. *American Sociological Review*, vol. 38, no 2, pp. 242–258.
- Mishkin F., Hall R., Shoven J., Juster T., Lovell M. (1978). Consumer Sentiment and Spending on Durable Goods. *Brookings Papers on Economic Activity*, vol. 1, pp. 217–232.
- Moylan C. (2010) Cyclical Indicators for the United States. *Third International Seminar on Early Warning and Business Cycle Indicators*. Moscow, Russian Federation, November 17–19. Available at: [http://www.bea.gov/papers/pdf/US\\_Cyclical\\_Indicators\\_Moscow.pdf](http://www.bea.gov/papers/pdf/US_Cyclical_Indicators_Moscow.pdf) (accessed on 3 May 2014). *Economic Sociology*. Vol. 15. No 3. May 2014 [www.ecsoc.hse.ru](http://www.ecsoc.hse.ru) 68
- Nauen M. (2006) Metod kogortnogo analiza v sociologii [Method of Cohort Analysis in Sociology]. *The Journal of Sociology and Social Anthropology*, vol. 9, no 3, pp. 137–144 (in Russian).
- Noble N., Windsor Fields T. (1982) Testing the Rationality of Inflation Expectations Derived from Survey Data: A Structure-Based Approach. *Southern Economic Journal*, vol. 49, no 2, pp. 361–373.
- O'Brien R. M., Hudson K., Stockard J. (2008) A Mixed Model Estimation of Age, Period, and Cohort Effects. *Sociological Methods & Research*, vol. 36, pp. 402–428.
- Ryder N. (1965) The Cohort as a Concept in the Study of Social Change. *American Sociological Review*, vol. 30, no 6, pp. 843–861.
- Sasaki M., Suzuki T. (1987) Changes in Religious Commitment in the United States, Holland, and Japan. *American Journal of Sociology*, vol. 92, pp. 1055–1076.
- Savel'eva I., Poletayev A. (1997) Smena pokoleniy [Generational Replacement]. Savel'eva I., Poletayev A. *Istoriya i vremya: v poiskakh utrachennogo* [History and Time: Searching the Past], Moscow: Yazyki russkoi kul'tury, pp. 360–371 (in Russian).
- Semenova V. (2005) Sovremennye kontseptsii i empiricheskie podkhody k ponyatiyu "pokolenie" v sociologii [Contemporary Concepts and Empirical Approaches to the Notion of Generation in Sociology]. *Otsy i deti: pokolencheskii analiz sovremennoi Rossii* [Daddies and Children: A Generational Analysis of Contemporary Russia] (eds. Yu. Levada, T. Shanin), Moscow: New Literary Review, pp. 80–107 (in Russian).
- Shanin T. (1997) Postskriptum: Voprosy vybora [Postscript: Questions of Choice]. Shanin T. *Revolution as a Moment of Truth 1905–1907 — 1917–1922* (Translated by E. Kovalev), Moscow: Ves' Mir (in Russian).
- Shanin T. (2005). Istoriya pokolenii i pokolencheskaya istoriya [History of Generations and Generational History]. *Otsy i deti: pokolencheskii analiz sovremennoi Rossii* [Daddies and Children: A Generational Analysis of Contemporary Russia] (eds. Yu. Levada, T. Shanin), Moscow: New Literary Review, pp. 17–39 (in Russian).
- Shorrocks A. F. (1975) The Age-Wealth Relationship: A Cross Section and Cohort Analysis. *Review of Economics and Statistics*, vol. 57, no 2, May, pp. 155–163.

- Sokolova N. (2010) Pokolenie Igrep [Generation “Y”]. *Profil*, vol. 34, no 685, 20 September. Available at: <http://www.profile.ru/archive/item/58878> (accessed on 14 May 2014) (in Russian).
- Souleles N. (2004) Expectations, Heterogeneous Forecast Errors, And Consumption: Micro Evidence Form. The Michigan Consumer Sentiment Surveys. *Journal of Money, Credit and Banking*, vol. 36, no 1, February, pp. 39–72.
- Strauss W., Howe N. (1997) *The Fourth Turning: An American Prophecy — What the Cycles of History Tell Us about America’s Next Rendezvous with Destiny*, New York: Broadway Books.
- Thomas L. B., Jr. (1999) Survey Measures of Expected U.S. Inflation. *Journal of Economic Perspectives*, vol. 13, no 4, pp. 125–144. *Economic Sociology*. Vol. 15. No 3. May 2014 [www.ecsoc.hse.ru](http://www.ecsoc.hse.ru) 69
- Urlanis B. Ts. (1968) *Istoriya odnogo pokoleniya. Sotsial’no-demograficheskiy ocherk* [The History of the One Generation. Social and Demographic Essay], Moscow: Mysl’ (in Russian).
- Voronkov V. (2005) Proekt «shestidesyatnikov»: dvizhenie protesta v SSSR [The Project of the Generation of the 1960s: Protest Movement in the USSR]. *Otsy i deti: pokolencheskii analiz sovremennoi Rossii* [Daddies and Children: A Generational Analysis of Contemporary Russia] (eds. Yu. Levada, T. Shanin), Moscow: New Literary Review, pp. 168–200 (in Russian).

Dilyara Ibragimova

National Research University Higher School of Economics (Moscow, Russia). Department of Economic Sociology. Associate Professor;  
E-mail: [dibragimova@hse.ru](mailto:dibragimova@hse.ru), Tel. +7 (915) 304-47-79 (mob)

**Any opinions or claims contained in this Working Paper do not necessarily reflect the views of HSE.**

**© Ibragimova, 2014**