SUMMARIES

Plenary Session

Keynote Speech

How does the expansion of higher education change the returns to college quality? Insights from sixty years of Russian history

KLARA SABIRIANIOVA PETER *(Associate Professor of Economics, Department of Economics, Carolina Population Center University of North Carolina—Chapel Hill, USA)*

In the ten years between 1997 and 2008 the number of college students in Russia surged from 3 to 7.5 million, the number of universities has more than doubled, and the college enrollment rate increased by more than 30 percentage points. We study the effect of this remarkable expansion of higher education on changes in college quality and labor market returns to college quality.

We use a unique linked dataset that combines four different sources: a 17-year nationally representative panel of individuals (the Russia Longitudinal Monitoring Survey of HSE); the university database; official regional and national statistics from 1950 to 2011; and the archives of Soviet and Russian laws. The majority of previous studies on college quality rely on time-constant quality measures for a given cohort of students in a cohort-based panel such as NLSY. Our study makes a step forward compared to the existing literature by constructing a number of time-varying proxies for college quality over a 60-year period and identifying the cross-cohort shifts in returns to college quality.

After controlling for age-time effects and constant individual heterogeneity, we find evidence of declining college quality and increasing returns to college quality for the cohorts that obtained education during the period of expansion. The selection into college is modeled using the exogenous changes in the rules of military conscription of students after WWII, changes in compulsory schooling laws, and unexpected shifts in the wage gap between manual and non-manual workers.

The paper shows that labor markets respond to an expansion-related decline in average college quality by penalizing graduates from low-quality programs, by awarding graduates from high-quality programs, and by increasing the overall price heterogeneity. We also show that the expansion of higher education is likely to increase the observed returns to college quality by improving the assortative matching between the college quality and student abilities. Both price heterogeneity and assortative matching effects are found to be positively associated with college expansion in Russia.

Keynote Speech

The promise and potential of the RLMS-HSE (and other panel data sets) in an interconnected world

DEAN LILLARD *(Associate Professor, Department of Human Sciences and Director and Project Manager of the Cross-National Equivalent File Study, Ohio State University, USA)*

Although most people recognize that panel data can be used to estimate richer and more sophisticated empirical models, researchers often fail to realize the full potential those data offer.

Here I will first survey how researchers are using the RLMS panel data. I will then explore how researchers can take fuller advantage of the richness of the data to describe important patterns in social and economic outcomes; outcomes that are relevant to ongoing scientific and policy debates both nationally and internationally. I will then suggest ways that the survey itself can leverage its unique position to enhance and extend both the use and scientific value of the RLMS. In all cases, the issues I discuss will apply not only to the RLMS but to panel data sets generally.

Parallel Sessions

Session 1 Coping with Shocks in Households

The effect of macroeconomic shocks on changes in household structure: the case of Russia

KSENIYA ABANOKOVA *(National Research University "Higher School of Economics", Russia)*
MICHAEL M. LOKSHIN *(World Bank, USA)*

The study of family structure in Russia was stimulated by changing in structure of Russian households over the past two decades. The patterns suggest that decision about changing of households may be endogenous with respect to economic recessions. The extent to which individuals combine households in response to economic shock is not well-documented in Russian literature. The two recent economic recessions in 1998 and 2008 presents the opportunity to study the effect of drop in incomes on after crisis family behavior and household structure. The main question of our analysis is whether the households that experience a negative income shock are more likely to move in together. We hypothesize that individual faced with a tradeoff between taking advantages of economies of scale in consumption and the consumption derived from individual privacy. During the crisis individuals attempt to minimize the impact on consumption reducing privacy and become large as a result. Using the RLMS, we combine different aftershock movements of households into several aggregate household types and treat the change of household structure as a coping strategy that households in Russia undertook in 1998 and 2008 years to mitigate the effect of the crisis on their welfare. A different estimation strategy is then used to evaluate the impact of crisis. The possible endogeneity of coresidence is also considered. Results from probit regression models suggest that households who were experienced an drop incomes more likely moved in with others than households which incomes was remained the same.

Insuring calorie intakes against income shocks
STEPHANIE VON HINKE KESSLER SCHOLDER *(University of York, UK)*
GEORGE LECKIE *(University of Bristol, UK)*

All individuals require a minimum level of energy intake each day. We examine the extent to which, as well as how individuals 'insure' their calorie intakes in the face of large, unanticipated, shocks to household income. Allowing for partial insurance, we jointly estimate the decomposition of household-level income into permanent and transitory shocks and the household- and individual-level response to such shocks, allowing for clustering of individuals' diets within households. Our results suggest that individuals attempt to insure their calorie intake by changing the composition of the consumption basket, with some food groups reacting

strongly to (permanent) income shocks, whilst others are fully insured against both permanent and transitory shocks. In addition, we find some suggestive evidence that income shocks change individuals' diet composition, disproportionately increasing the consumption of 'cheaper' calories. Despite this, total calorie intakes are only partly insured. More specifically, we find that 32-37% of the effect of income shocks on food expenditures is transmitted to changes in calorie intakes, with 63-68% insured mainly through home production and help from family and friends.

Do family policies address the causes of depopulation in Russia? Evidence from the maternity capital reform

SERAFIMA CHIRKOVA (*Universidad de Alicante, Spain*)

Despite the proclaimed active policy measures to increase Russian population, the population growth rate still remains negative. I reconcile these trends and focus on fertility decisions to analyse the reasons underlying the low birth rates. In particular, I focus on the Russian family policy reform of 2007, designed to support the decision of women to have second and subsequent children. It introduced the concept of maternity capital, which amounted to an 8800-euro voucher that the family could allocate to pre-specified uses: improvement of housing conditions, payment for the child's education, or contribution to the mother's pension scheme. To identify the impact of this pro-natalist policy on the fertility incentives I exploit the variation in family incomes and housing conditions together with the regional variation in the economic characteristics and state support for mothers with newborns. Using the Russia Longitudinal Monitoring Survey for the period 2001-2011, I analyse the impact of the reform on the decision to have a second child. I estimate a binary choice model of fertility exploiting the variation in the individual, household and regional socio-economic characteristics. The results confirm that the reform increased the probability to have a second child.

A model of the housing privatization decisions in transition economics: an option value approach

MARIA PLOTNIKOVA (*Aberystwyth University, UK*)
NORDVIK VIGGO (*NOVA – Norwegian Social Research, Norway*)

Privatization of public housing in form of transfer of ownership to existing tenants took place in many countries. The objective of this study is to formally model housing privatization decision from the household point of view. The model is based on a real option approach where the tenants choose either renting or owning. Each of these two tenures possesses different stochastic properties and also has different implications for future choice sets. The theoretical framework provided here can be utilized in analyses of the many varieties of right-to-buy-policies elsewhere. The empirical part of the study concerns the issue of housing privatization in Russia that was started in the early 1990s. Privatization proceeded slowly despite the fact that the dwellings were offered to their residents for free. The option value approach can help explain the delay in privatization as one of the factors behind the slow response to the homeownership offer is the uncertainty over providing for maintenance and major renovation in multi-family buildings. The empirical evidence of protracted housing privatization in Russia suggest modeling the length of time before the household switches to homeownership as a function of household, dwelling and locational characteristics thus capturing the option value of switching to homeownership. This is done using duration analysis of time-related privatization data obtained from the Russia Longitudinal Monitoring survey.

Session 2 Trends in Health

Trends in health expectancy in contemporary Russia

YUKA MINAGAWA *(Waseda University, Japan)*

Background: Although life expectancy at birth is steadily improving in contemporary Russia, it remains unclear whether increases in longevity are accompanied by reductions in morbidity. Using the concept of health expectancy, I examine trends and changes in the overall health status of working-age men and women in Russia during the post-Soviet period. The macro-level determinants of health expectancy are also identified.

Methods: Data from the Russian Longitudinal Monitoring Survey of the Higher School of Economics (RLMS-HSE) from 1994 to 2009 are used to compute the following three types of health expectancy among working-age individuals: healthy life expectancy (HLE), illness-free life expectancy (IFLE), and disability-free life expectancy (DFLE).

Results: The analyses from the prevalence-based Sullivan method demonstrate that men and women aged between 15 and 54 in Russia have experienced substantial increases in both life expectancy and health expectancy over the past two decades. In particular, men have enjoyed higher levels of HLE and IFLE compared to women. Further, macroeconomic indicators, including per-person GDP, unemployment rates, and inflation rates, are closely linked to health-related quality of life among the Russian people.

Conclusion: The present findings offer evidence to suggest the compression of morbidity thesis in the Russian context, thereby providing support for recent proposals to change the retirement age in Russia. Finally, efforts toward stabilizing the country's economic circumstances might have an important bearing on the health status of the population.

Longitudinal predictors of first and repeat abortion in Russia

KATHERINE KEENAN *(London School of Hygiene and Tropical Medicine, UK)*
EMILY GRUNDY *(University of Cambridge, UK)*
MICHAEL G. KENWARD *(London School of Hygiene and Tropical Medicine, UK)*
DAVID A. LEON *(London School of Hygiene and Tropical Medicine, UK)*

Despite substantial reductions in the post-Soviet period, Russia's abortion rate remains one of the highest in the world. A high proportion of these are repeat abortions, and the complications of abortion contribute to the high maternal mortality rate in Russia. Little is known about risk factors for first versus repeat abortions, and the possible relationship to alcohol use. The aim of this study was to explore these questions using longitudinal data.

Event history analysis using discrete-time hazard models was performed using RLMS waves 5-18 (1994-2009). Pooled logistic regression models were used to investigate the longitudinal predictors of women reporting having a first abortion, or a repeat abortion within the previous 12 month interval. 2623 women were included in the analysis, each of whom contributed 5.4 follow-up periods, and the follow-up rate was 83%.

The results showed that first abortions were predicted by parity and age, and repeat abortion was predicted by age, low education and alcohol use. There was a significant positive trend between drinking frequency and the odds of repeat abortion, and female binge drinkers were at increased probability of repeat abortion. The associations persisted after adjustment for socio-economic factors and contraceptive use.

The results show that the determinants of first and repeat abortion in Russia are different, and that female drinkers could be targeted in efforts to prevent repeat abortion. Further research is needed to understand the mechanism for the association between alcohol use and repeat abortion.

New estimates of adequacy of official abortion statistics in Russia

BORIS DENISOV (*Moscow State University, Russia*)
VICTORIA SAKEVICH (*National Research University "Higher School of Economics", Russia*)

We report a portion of a bigger research of the current situation in reproductive health in Russia with special attention to means of deliberate birth control practices. The research will depict reproductive health key indicators and identify the most common reproductive careers of Russian women. We use the official state statistics and the data of the XIXth round of the "The Russia Longitudinal Monitoring survey (RLMS-HSE)", which includes a special extra module, relating to women's reproductive health, contraception, abortion, and family planning. Existing contradiction between data sources is one of the important questions of our research. The theoretical framework of the work is the J. Bongaarts' proximate determinants decomposition of fertility. We conclude that the official statistics adequately reflect the level of abortions in the country.

Factors of patient choice in Russian health care

ALEXANDRA BURDYAK (*Institute for Social Analysis and Forecasting of Russian presidential Academy of National Economy and Public Administration, Russia*)

Ensuring the patients' right to choose a medical organization or a doctor has been declared by the government as a way to increase efficiency and quality of health care by means of stimulating competition among providers of care, and improving access of population to organizations that provide better medical care. RLMS data in comparison with the previous research[1] shows that despite the political declaration of assuring the right for choice the practice of patient choice has not become widespread during the two years (2009-2011). The main objective of this research is to get a more precise picture of the factors of consumers' choice in health care. Who is more likely to choose the doctor or medical care organization? Is income crucial for the choice in Russian health care? Among other factors I consider gender, age, income, marital status, size of the household, type of a settlement, respondent's involvement in health care, etc. A study is based on a 20-th round RLMS subsample of adults who applied for medical care in the past two years.

Session 3 Wage setting and wage inequality

Informality as a stepping stone

FABIAN SLONIMCZYK (*National Research University "Higher School of Economics", Russia*)
VLADIMIR GIMPELSON (*National Research University "Higher School of Economics", Russia*)

A large and growing fraction of employment in many countries over the world is "non-standard". Non-standard jobs vary from fixed-term or part-time arrangements to informal. In this paper we explore whether informal employment functions as a "stepping stone" toward formal positions. Informality implies high costs to governments in terms of forgone tax revenues and to workers in terms of relatively low earnings and high risk exposure.

The methodology we apply has been used to address similar questions regarding nonstandard contracts in Europe. Several studies have investigated whether temporary jobs are "dead ends" or rather "stepping stones" into regular employment. By analogy, we hypothesize that the role of informal employment in Russia has points of contact with that of fixed-term contracts in Europe.

We study the effect of informal employment on the probability of finding a formal job by looking at discrete and continuous time duration models. The discrete model can suffer from time aggregation bias as spells shorter than a year might not be detected. On the positive side, the regular RLMS provides data on a period of more than 10 years. It also allows clearly distinguishing different types of informal employment. The continuous model would have to be estimated using the retrospective employment history supplement that was administered together with the 2008 RLMS and captured spells as short as 2-3 months.

The effect of minimum wage on poverty: evidence from RLMS-HSE data

SERGEY KAPELYUK *(Siberian University of Consumer Cooperation, Russia)*

The impact of minimum wage on poverty in Russia to our knowledge has never been investigated. Russian data provide a unique opportunity for studying the poverty effects of the minimum wage due to significant increases of minimum wage in recent years, almost complete coverage, and a high representation of full-time workers in poor households. This article is devoted to assessing the effect of the minimum wage in Russia on poverty rate and transitions into and out of poverty. We use data from the longitudinal survey RLMS-HSE for the years 2006–2011. The panel character of the survey makes possible to assess transition effects from poor to nonpoor and vice versa. We use two different indicators of welfare to determine the poor: income and consumption. We found that an increase of the minimum wage in Russia has contributed to the modest poverty reduction.

Working in the public sector in modern Russia: good luck or unhappy fate? (Estimating the public-private wage gap)

ANNA SHARUNINA *(National Research University "Higher School of Economics", Russia)*
VLADIMIR GIMPELSON *(National Research University "Higher School of Economics", Russia)*

This paper aims to provide an extensive analysis of the wage gap between public and private sector workers. For this purpose, we exploit the Russian Longitudinal Monitoring Survey data for the 2000-2011 period. We start with measuring the gap at the mean (using OLS) and at various points of the conditional distribution (using quantile regression). Our empirical analysis shows that the negative public-private wage gap was significant and sustained. Public sector workers were paid on average 30% less relative to employees in the private sector (with similar observable characteristics). The quantile regression analysis suggests that more able workers have a larger penalty than less able (if we assume that unobserved abilities are positively correlated with level of pay). The latter approach provides more complex picture. While most

studies assume a constant wage gap, we repeat the exercise for the different years to assess the evolution over time. Finally, for each quintile explored we decompose the gap to separate effect of characteristics and effect of coefficients. In this exercise, we follow the methodology introduced by J. Machado and J. Mata. In general, the effect of characteristics explains from 8 to 40% of the gap while the rest is due to variation in returns. However, the decomposition reveals different pictures for men and women and their variation over time. Meanwhile, characteristics tended to increase the gap.

Earnings inequality and informal employment
ANNA LUKIYANOVA *(National Research University "Higher School of Economics", Russia)*

In this paper I investigate the impact of informality on earnings inequality in Russia using the RLMS-HSE data for 2000-2010. I find that during the whole period earnings inequality was substantially higher in the informal sector than in the formal sector. Informality increases the earnings polarization widening the both tails of the distribution. This effect, albeit small, is statistically significant. However, the contribution of informality is much smaller than the effects of other variables such as gender, education, region, and settlement type. Earnings inequality dramatically decreased in both sectors over the 2000-2010 period. In the formal sector the changes in the earning distribution were mainly generated by the changes in the distribution of hourly earnings. In the informal sector the reduction of inequality went through two channels: differences in both hourly rates and hours of work were declining. This reflects several underlying forces: a declining share of workers without permanent job and low barriers between the sectors (as inequality decreased by similar amount in both sectors). Changes in the structure of informality and conditional wage differentials did not have significant contribution to the decline in overall earnings inequality in 2000-2010, except for a group of workers without permanent job. In fact, one third of the overall decline in the variance of logs over 2000-2010 is due to workers without permanent employment.

Session 4 Alcohol consumption: use and abuse

The effect of ethanol 'affordability' on alcohol consumption in post-Soviet Russia
BORIS POPOV *(London School of Economics, UK)*

Despite a number of cross-country analyses demonstrating that alcohol, with its addictive qualities, is not an exception to the law of downward sloping demand, alcohol consumption and its determinants in Russia remain the subject of extensive academic and public debate. A widespread belief persists regarding price and income inelasticity of alcohol in the Russian context due to substitution between beverages. This study examines alcohol from the angle of its core ingredient – ethanol. I estimate the effect of a proposed 'affordability index' on ethanol consumption and separately on the probability of binge-drinking. Employing the panel structure of the Russian Longitudinal Monitoring Survey from 1994 to 2004, I propose methods to partially adjust for unobserved non-random misreporting. I find that ethanol 'affordability' has a consistently significant positive effect on both overall ethanol consumption and probability of binge-drinking. The effect is robust across different specifications. While the null hypothesis of no serial correlation of the errors is rejected under the Wooldridge test, the effect of 'affordability' remains significant using heteroskedasticity and autocorrelation robust standard

errors clustered at either individual or regional level. The results suggest the need for policy to address the effective price of ethanol in the market relative to changes in income.

Alcohol consumption in Russia: does method of delivery matter?

ARSENIY P. YASHKIN *(University of South Florida, USA)*
ROBERT CHRISTOPHER JONES *(Florida Economic Advisors, LLC, USA)*
TOMAS TAMULIS *(Kent State University College of Public Health, USA)*

This study attempts to determine whether there have been any observable changes over time in the pattern of alcohol consumption within Russia, particularly as it pertains to younger generations of drinkers. Longitudinal data from the RLMS survey is utilized to evaluate consumption rates of vodka, beer, and wine amongst twelve age cohorts during the 1994 to 2010 time period. We find evidence of homogenization in beverage references in the habits of progressively younger age cohorts. Older generations of drinkers retain the preference for hard liquor while younger generations are drinking less overall and progressively substituting beer for vodka as their beverage of choice. This phenomenon is part of an overall shift away from high-content alcohol to low-content alcohol among the younger generation. In light of this positive trend, strategies aimed at reinforcing any existing trends to decrease alcohol consumption and substitute towards low potency alternatives are warranted.

Alcohol use in modern Russia: factors of demand and consumption patterns

YANA ROSHCHINA *(National Research University "Higher School of Economics", Russia)*

The goal of this project is to find out the influence of some economic and social factors on the demand for different beverages and on the choice of consumption pattern in modern Russia. The number of regression models is estimated on the base of "The Russia Longitudinal Monitoring Survey (RLMS-HSE)" 1994-2011. There are classic models of demand for alcohol of Becker and Murphy (1988): static, myopic and rational addiction models. We use two-step way of estimation because of two-step consumer decision ("to drink or not to drink" and how much to drink). This way let it possible to find out the factors of every decision separately. The idea of this research is to use as independent variables not only economic parameters (as prices and incomes of respondent and his\her family members) but some social characteristics such as educational level, gender, age, nationality, optimism level, alcohol use by other family members, and other. The first results have demonstrated that some social factors (education, marital status, alcohol use by other family members) are more important that the economic ones (as price for alcohol), as for the demand for pure alcohol as for the demand for every beverage. Also 13 drinking patterns were found using the cluster analysis. They differ by the structure of consumption, habits and social and demographic characteristics.

Class and drinking patterns: signs of cultural change

MIKHAIL F. CHERNYSH *(*Institute of Sociology, Russian Academy of Science, Russia*)*

Heavy alcohol consumpiton is a burning problem for Russian society. In Russia drinking alcohol is part of a long-standing tradition. However there is ample evidence that shows that the patterns of alcohol consumption are subject to change. The paper explores the dynamics of alcohol consumption in two dimensions – the consumption of vodka and other strong drinks and the consumption of wine. Vodka is regarded as part of the heritage and a beverage consumed across society, wine is viewed as alcohol chosen mainly by the Russian middle class. The RLMS

data testify that the consumption of alcohol is heavily influenced by gender, age and class affiliation. Class appears to be the strongest factor of influence in the consumption of alcohol.

Session 5 Incomes and inequality

Multidimensional poverty measurement: Shouldn't we take preferences into account?

KOEN DECANCQ *(University of Antwerp, Belgium)*
MARC FLEURBAEY *(Université Paris Descartes, France)*
FRANCOIS MANIQUET *(Université catholique de Louvain, Belgium)*

We study multidimensional poverty measurement. We propose to use agents' preferences themselves to aggregate the different poverty dimensions. We axiomatically derive a family of poverty indices. The key axiom consists in a priori identifying which preference relation makes experiencing deprivation the most severe experience. Then, we use data from the Russia Longitudinal Monitoring Survey (RLMS-HSE) to illustrate the approach. We find considerable empirical differences between the results based on a preference-sensitive multidimensional poverty measure and one-dimensional or preference-insensitive alternative measures.

Dynamics of income inequality and poverty in Russia and its determinants at the micro-level in 1992 – 2010 – Russia

ALINA PISHNYAK *(National Research University "Higher School of Economics", Russia)*
DARIA POPOVA *(European University Institute, Italy)*

This paper analyses the dynamics of inequality and poverty in the post-Soviet Russia. It considers a comprehensive system of indicators of material well-being covering the period of 1992-2010, including income and consumption measures, as well as alternative approaches to measuring poverty and inequality. The data comes from two sources – the national macro-statistics and the Russian Longitudinal Monitoring Survey (RLMS-HSE).

We apply the RLMS-HSE data to study the dynamics of the micro-level determinants of inequality and poverty in Russia over the last 20 years. Understanding the role of various factors of income poverty and inequality is important for the impact assessment and the choice of options for the redistributive policy. Thus, employing the decomposition techniques this paper seeks to examine the extent to which income poverty and inequality in the distribution of income are the result of demographic, socio-economic and spatial disparities within the country, and to distinguish patterns of poverty and inequality specific for particular stages of economic cycle (economic growth vs. recession).

Targeting performance of social cash benefits at multidimensional deprivation in Russian Federation in 2000 – 2011

MARKUS KAINU *(University of Helsinki, Finland)*

This paper analyses the targeting performance of monetised in-kind benefits at poor household deprived in terms of income, consumption and material well-being. The social crisis resulted from Russian transition from the socialist system to market economy is far from over. Poverty rates have been falling in 2000s, but a significant proportion of households are still

having incomes below the subsistence minimum and the income inequality has been in increase. The socialist welfare state favoured services and in-kind benefits over income transfers. That structure made it weak in terms of poverty reduction and redistributive capacity, but the system wasn't greatly reformed until 2005. Since then the system of in-kind benefits (l'goty) has been dismantled through monetisation of the benefits. These schemes of income transfers covers roughly one fourth of Russian households and have potential to improve the situation. Therefore this paper asks a question to what extend monetisation reform has improved the capacity of Russian welfare state to fulfil its modern tasks of redistribution of income and reduction of poverty? Paper utilises a cross-sectional setting with over-time comparison between rounds 9 to 20 of the Russian Longitudinal Monitoring Study dataset.

Income mobility in Russia in the 2000s before the global economic crisis
TATYANA BOGOMOLOVA *(Institute of Economics and Industrial Engineering Siberian Branch of Russian Academy of Science, National Research University Novosibirsk State University, Russia)*

The paper is to study the scale, intensity and factors of income mobility of individuals in Russia in the 2000s before the global financial-economic crisis. This stage in Russian history was a long - by Russian standards - period of relative economic stability, which made the formation of specific patterns of income mobility possible. This kind of research allows us to obtain a deeper understanding of the nature of and the reasons for current social and economic changes, which enables us to encourage positive change in the future more effectively. The research gives answers for the following questions: Have real income increases been greater for the poor or the rich? How did the increasing activity of state in the field of social policy influence people's income mobility? The research is based on the data of the Russian Longitudinal Monitoring Survey (RLMS) for the period of 2000-2008.

Do informal workers make an underclass? Analysis of the subjective social status
ANNA ZUDINA *(National Research University "Higher School of Economics", Russia)*

This article addresses the elaboration of a new approach to informal employment research based on the analysis of the subjective social status. In spite of numerous studies conducted for the past 40 years many blank spots are to be found in the field of informal employment research. The heterogeneous nature of activities incorporated into the concept of "informality" defines the ambiguity of its impact on the economy and society. Thus little is actually known about the socioeconomic position of informal workers and the nature of informal employment. Is informality a kind of stratifying mechanism embedded in the social structure that changes the position of the informally employed or not? The so-called "direct" approach based on the analysis of levels of income was considered to be an inappropriate framework and thus indicated that the consequences of informal employment need to be further analyzed together with indirect – subjective - measures. Issues of methodology are discussed and results concerning the subjective social position of informally employed workers in contrast to formal employment, unemployment and economically inactive states of workers are presented. The study was carried out on the basis of a large nationally representative panel: the Russia Longitudinal Monitoring Survey of the Higher School of Economics (RLMS-HSE) for 2000-2010. The existence of three-

tier informal employment in Russia is revealed with self-employment being better off than formal employment and informal wage and salary work. No significant difference between informal wage and salary work and formal employment in terms of subjective social status is found. Taken as an indirect indicator of the quality of Russian formal employment, this could point to the great weakness of labor market institutions and the idle channels of social mobility of the Russian formal sector.

Session 6 Dynamics of Health

On the determinants of self-assessed health in Russia: attrition, state dependence and heterogeneity

CHRISTOPHER J. GERRY *(University College London, UK)*
GEORGE PAPADOPOULOS *(University of East Anglia, UK)*

In this paper, drawing on the individual level data of the Russian Longitudinal Monitoring Survey – Higher School of Economics (RLMS), we aim to characterise and explain the socioeconomic determinants of Self-Assessed Health (SAH) in Russia within a dynamic econometric framework. Adopting a health production framework we examine potential attrition related selection bias, while also seeking to distinguish between state dependence and heterogeneity within a dynamic framework. We find i) that there is a trend increase in mean SAH which is consistent both with an improving health profile for Russia but also with health related attrition; and ii) that SAH exhibits persistence for males and females consistent both with (the hypothesised) state dependence and with individual heterogeneity. In the remainder of the paper we seek to address the practical econometric challenge stemming from (i) and the conceptual econometric challenge resulting from (ii).

Economic theory as a guide for the specification and interpretation of empirical health production functions

SERGEY MITYAKOV *(Clemson University, USA)*
THOMAS MROZ *(Clemson University, USA)*

We employ a model of utility maximization with health production to derive precise interpretations of estimated effects of observable inputs on health outcomes when some other inputs are not observed. We show that if omitted or unobserved inputs are not properly accounted for, then estimated marginal products of health inputs cannot be easily interpreted. Using a general theoretical model, we propose empirical specifications to control for the omitted inputs. The resulting "effects" one can estimate using such specifications do not correspond exactly to the marginal products of the observed inputs on health. One can, however, establish some likely bounds on the "true" marginal products of the observed inputs when one uses empirical specifications compatible with economic theory. This bound is equivalent to the effect one can estimate with an experimentally assigned input. We also discuss approaches for obtaining more informative bounds if one believes that particular separability assumptions in the utility function are reasonable and demonstrate their performance in a simulation exercise. We present empirical evidence demonstrating the issues raised in our theoretical analysis using data on children's growth from the Russian Longitudinal Monitoring System of HSE (RLMS-HSE).

A prospective analysis of labor market status and self-assessed health in Britain and Russia

LORETTA PLATTS *(Imperial College London, UK)*

Objective: To analyse the impact of labour market status upon subsequent development of poor health in Britain and Russia, and the role of economic factors in accounting for the relationship between labour market status and health.

Methods: Data are from three rounds of the Russian Longitudinal Monitoring Survey (2000-2002) and 11 waves of the British Household Panel Survey (1993-2003). Cox proportional hazards modelling was used to predict individual level decline to "poor" or "very poor" self-reported health in the two countries in relation to labour market activity and financial adequacy.

Results: Of 7050 individuals originally in good or adequate health in Britain, 1800 individuals reported poor or very poor self-rated health during 10 years of follow-up. Of 5318 individuals originally in good or adequate health in Russia, 651 individuals reported poor or very poor health over two years of follow-up. In both countries, participants who were male, younger, in work, with better initial health and who were more confident about their finances were less likely to report poor health in follow-up. After adjustment for gender, age, initial health and marital status, being unemployed and retired were associated with the development of poorer health in both countries. These associations were slightly reduced after taking individuals' economic circumstances and education level into account.

Conclusions: Labour market inactivity in Russia and Britain predicted the development of ill health, as did economic circumstances, suggesting that these social determinants of health independently contribute to health inequalities in both countries.

Session 7 Education and Human capital

Overeducation in Russian labour market

MERUYERT BEISENBAYEVA *(University of Sheffield, UK)*

Switching from a centrally-planned economy to a free market caused many changes in Russia's labour market. The number of private educational institutions increased with a new law in 1992 which allowed the functioning of such institutions. It gave more access to higher education; people started joining universities, enrolment in universities increased by around 2.5 times and enrolment in vocational schools decreased 2 times from 1990 to 2010. Wage decentralization, price liberalization, and labour mobility intuitively should all increase wages of productive workers or educated people while the increased number of university graduates and declining rate of educational expenditures should cause employability problems. Supply of university graduates during this period almost quadrupled and the number of vocational graduates reduced by 2 times. However insufficient funding of the education system could lead to a lower quality of education together with an overcrowded population in the educational attainment places. Also to increase profits and keep universities functioning, the private sector as well as the public could accept lower-skilled students to fill the empty places, because of a shortage of financing from the government. In the labour market the share of overeducated workers could increase taking into account the lower human capital of the later generation and imbalance of supply and demand for skilled workers.

Does education or underlying human capital explain liberal economic attitudes?

JOHN V.C. NYE *(George Mason University—National Research University "Higher School of Economics", USA—Russia)*
SERGIY POLYACHENKO *(National Research University "Higher School of Economics", Russia)*

There is a worldwide tendency for more educated people to trust in markets, private business, and trade, and to distrust government regulation and public provision relative to the less educated even in countries where people generally favor regulation (Aghion, et al. 2010). Individual survey data drawn from the Russian RMLS indicate that for Russia, as for most of the world, respondents with higher levels of education are more likely to trust private businesses, foreign banks, and privatization, to distrust government regulation, and to favor lesser provision of services by the State (vs. the private sector). This matches the macro survey findings of Aghion et al. (2010) for the transition economies and the work of Caplan (2001, 2002, 2007). However, it is not clear whether education is a causal factor in these preferences or whether education is proxying for different levels of cognitive ability, health or other forms of human capital. We use individual height data as instruments for education to remove the contemporaneous effects of schooling itself on the education trust link. We find that this IV estimation leaves us with clear and persistent links between education and market friendly attitudes in Russia. This human capital effect is also quite independent of the role of age in determining liberal attitudes and is not simply a cohort effect. This seems to conform to the worldwide observation that – whatever the independent changing institutions –greater health and cognitive ability seems to promote liberal beliefs in and of themselves.

Pay-off of the on-the-job training on wages

PAVEL TRAVKIN *(National Research University "Higher School of Economics", Russia)*

Many Russian companies have in its corporate policy the on-the-job training programs. By training their employees firms expect to get some benefit due to increasing their performance or, in other words, their experience level and obtaining new skills. However, training is beneficial not only to the firms, but also to the employees. In European countries companies are serious about vocational training: most of them do the training of their employees in some way, whether it is on-the-job training or sending to training in a specialized institution. According to the human capital theory the increase worker's productivity should receive an increase their wages. The aim question of this study: have Russian workers benefits in wages after on-the-job training? To answer this question the author use various econometric models and data from RLMS-HSE in 2004-2011. Receiving additional training has a positive effect on salary and wage growth and pay increase may be indicative of an increased level of the employees' performance. The results obtained do not fall out of the trend line of previous studies.

The importance of prenatal testosterone for female wages: 2D4D evidence from Russia

EKATERINA KOCHERGINA *(National Research University "Higher School of Economics", Russia)*
JOHN V.C. NYE *(George Mason University—National Research University "Higher School of Economics", USA—Russia)*

MARIA YUDKEVICH *(National Research University "Higher School of Economics", Russia)*
EKATERINA OREL *(National Research University "Higher School of Economics", Russia)*

Prenatal androgen exposure correlates with various measures of individual performance in sports, business, or school. However, still there is relatively limited evidence on the impact of prenatal androgens on life achievement. Using data from the Russian longitudinal survey (RMLS) and measured digit ratios, we found that age-corrected market wages are correlated with low measured 2D4D ratios signifying higher prenatal testosterone. More precisely however, we find that for women, there is a clear inverted U-shaped relationship between prenatal T exposure (using 2D4D) and wages. This suggests that important non-cognitive characteristics such as confidence and risk-taking have significant effects in the labor market that – unlike cognitive ability –are not monotonically positive. Unlike earlier work on non-cognitive correlates of labor market wages, our findings indicate a clear-cut optimum 2D4D ratio for women's wages, with very high and very low 2D4D being associated with lower wages. This matches earlier work finding an analogous nonlinear relationship between women's 2D4D and university grades (Nye, et al. 2012), this time using a much larger and more heterogeneous sample of people of all ages from Moscow.