



R S S I A

Russian Summer School on Institutional Analysis

Research Projects

June, 28 – July, 5, 2014

**National Research University
Higher School of Economics**

Moscow

Contents

<i>Adam, Roxana: Organizational Change Barriers in Romanian Academic Environment</i>	5
<i>Ankowska, Ania: Local Enterprise Partnerships as New Private-Public Entities that are Capable of Promote Growth via Entrepreneurial Governance</i>	9
<i>Britze, Nils M. A.: Analyzing Economic Decisions in Organizations and Demographic Change: a New Institutional Economics Approach</i>	14
<i>Bryukhanov, Maksym: Do Girls Shy Away From Competitive Specialties?</i>	20
<i>Datskova, Liudmyla: The Eurasian Union as a Mode of Integration for the Hybrid Regimes in the Post-Soviet Space: Characteristics, Reasons and Forecasts</i>	25
<i>Derkachev, Pavel: The Impact of Indicators Funding General Education on the Results of Unified State Exam in the Russian Regions</i>	34
<i>Dokuka, Sofia, Valeeva, Diliara, Yudkevich, Maria: The Joint Influence of Online and Offline Social Networks on Academic Performance</i>	40
<i>Edachev, Artem, Nathov, Timur, Polischuk, Leonid: The Impact of War on Social Capital: the Case of World War II in the Soviet Union</i>	44
<i>Fedorovykh, Danil: Effects of Legalizing Bribe Giving</i>	48
<i>Hwang, Jeeyoung: Agency Problems in Russian Banking System</i>	50
<i>Ivanov, Denis, Borisova, Ekaterina, Govorun, Andrey, Levina, Irina: What is the Relationship between Trust and Preferences for Redistribution in Russia?</i>	53
<i>Khmelev, Anton: How the Procurers Influence Competition in Public Tenders?</i>	57
<i>Kholodilin, Konstantin: Homeownership and Housing Market Regulations: a Case of Germany</i>	62
<i>Malkova, Alina: Processes of Diffusion of New Knowledge</i>	66
<i>Ostapenko, Nataliia: Influence of National Culture on the Opportunistic Behavior of Business: a Comparative Analysis of Survey Data</i>	73
<i>Ostrovnaya, Maria, Podkolzina, Elena: E-auctions as a way to eliminate favoritism in public procurement</i>	79
<i>Ovsiannikov, Kostiantyn: Japanese Corporate Culture as a Prerequisite towards Overcoming the Economic Recession of 1990-2000s</i>	83
<i>Patil, Vikram S.: What Determines an Access to Compensation Claim? An Analysis of Farmers' Decision in India</i>	87
<i>Ryzhkova, Marina: Market Price Bubble and Its Impact on Subjective Well-being</i>	92
<i>Sakaeva, Maria: Informal Practices in Russian Legislative Bodies: How Entrepreneurs Avoid the Rules for All and Protect their Property Rights</i>	97
<i>Shakina, Elena, Yudkevich, Maria: Remunerative Incentives and Commitment in Academic Contract: Empirical Evidences from NRU HSE</i>	103

<i>Shestakov, Daniel: Peasants, Rivers and Railroads: The Role of Human Capital Accumulation in Early Russian Economic Growth</i>	107
<i>Sokolova, Marina: Does the WTO Accession Influence the Effect of Cultural and Institutional Proximity on Bilateral Trade?</i>	110
<i>Sumkin, Dmitry: Asymmetry of Information in Case of Choosing a Method of Institutional Arrangements</i>	113
<i>Sun, Huojun: Trust by Endogenous Social Norms</i>	117
<i>Tahirov, Rustam: Major Reasons for High Intermediation Cost (Lending Rate) in Azerbaijan</i>	124
<i>Vasilyeva, Olga: Do Mayors Elections Matter for Productivity? Evidence from Russian Firm-Level Data</i>	127
<i>Zubanov, Andrey, Karabekyan, Daniel: Commuting Time as a Determinant of Academic Achievement</i>	130

Adam, Roxana¹: Organizational Change Barriers in Romanian Academic Environment

Abstract: *The paper derives its originality from the fact that it exceeded the focus on the technical elements of change and it brings to the forefront the key human element which is central to the successful implementation of change in organizations. The research paper presents the orientation of Romanian universities towards organizational change. It reveals the most common types of organizational change among faculties and some significant factors that could contribute to block the change. The study reveals the importance of motivating employees to participate actively in the change process in order to accept organizational changes.*

Introduction

The statistical analyze of a previous research² shown that a Romanian university is oriented towards change, all the faculties acted to change the occupational area and content of staff faculty duties, 85% of faculties acted to change the status of university employees and more than 90% acted to change the formal and informal social relations within the faculty staff.

For the organizational change within the university's faculties, the most important objectives have been: improving learning conditions for students and improving communication and information exchange across the university or with other institutions or organizations. Other significant objectives have been: to improve teaching methods and to improve learning conditions for stud to improve the ability to develop new educational approaches.

The results shown that the main problems encountered in achieving organizational change were represented by higher cost, discouraging legislative regulation and human capital. It was also observed that financial and non-financial incentives were successful methods used in producing new ideas and increase creativity. Based on the research findings an assumption for a future research was release: a low employees (academic body) motivation due to lack of financial and non-financial incentives increase resistance or disinterest toward organizational change in universities.

The present research project is a work in progress paper, a continuation of the previous research.

Aim of the Project

The nowadays universities function as organizational structures. For example, in Romania, universities are operating on different hierarchical levels which may be associated with a pyramid on top of it we found the Academic Senate and the Rector, in the middle are the university faculties and at pyramid's bottom are all the departments of each faculty.

¹ roxana_adam2004@yahoo.com, National Institute of Economic Research, Romanian Academy

² Cornescu V. and Adam R., Organizational Change. Managing Employees Resistance (will be published in June 2014, copyright to SAMRO).

The University is an institution which produces ideas and knowledge. It generates new insights, which in one way or another will inevitably lead to change. Romanian higher education system is oriented to a knowledge-based society and the universities are pursuing the valorization of staff (professors) creativity and also to train young specialists with an opening towards: applying the “new”, creating the “new” and to mitigate or eliminate resistance to change of organization members.

This work intends to examine organizational change in Romanian universities in order to identify and understand, through a nationwide study, the universities orientation towards change, employees’ attitude and change barriers. Organizational change is a difficult phase in university’s life because it involves a transfer from a “known” to an “unknown” situation. In today society moreover universities are change promoters.

Hypotheses and Methodology

Design

In order to gain insight into what types of organizational change is implemented in universities, the previous study used a survey instrument and the questionnaire design was based to an official questionnaire of National Institute of Statistic and validate by specialists. The same online questionnaire will be used in order to obtain representative data, by identifying different aspects of the organizational change in faculties in order to describe the Romanian universities orientation towards organizational change.

Participants

Questionnaire participants include the faculty governing body, one representative for each faculty of the studied universities. The questionnaire will be address to all faculties included in each university from the sample. Questionnaire should be complete just by a faculty governing body who knows the details requested about the faculty, such as: dean or pro dean.

Research limitations

This study assumes that universities are similar to organizations, having various hierarchical levels. It examines the organizational change at only one time point in faculties of different universities. The reference period is the currently mandate of faculty governing body and perceptions of the organizational change may change over time.

Potential hypotheses

H1: Financial incentives increase the number of organizational changes adopted by faculties.

H2: Non-financial incentives stimulate employees’ participation in organizational change process.

H3: In constraint circumstance employees are more willing to adopt change.

H4: Negative past experience with similar organizational changes increase the perceived risk of change for the same area of interest.

H5: Adapters are individuals with strong self-efficacy.

H6: Discouraging legislative regulation block good ideas of change.

H7. More than 30% of the accepted organizational change fails to be implemented due to cost factors.

Expected Results

Through this research I expect to obtain evidence of the factors that contribute to or block the organizational change in universities. The study is address to a representative sample; therefore the obtained results will be used to make inferences about Romanian Universities, in order to present a general situation of organizational change in universities at national level. Based on the responses, it will be possible to realize different universities profiles through cluster analyses and to validate an econometric model by using logistic regression.

References

- Agboola A.A. and Salawu R.O., 2011. Managing Deviant Behavior and Resistance to Change. *International Journal of Business and Management*, Vol. 6, No. 1; January.
- Avey, J. B., Wernsing, T. S., & Luthans, F., 2008. Can positive employees help positive organizational change? *Journal of Applied Behavioral Science*, 44(1), 48—70.
- Bernard Burnes, 2004. *Managing change: a strategic approach to organisational dynamics*, Harlow : Financial Times Prentice Hall.
- Bernard Burnes, 2009. *Managing change*, Harlow : Financial Times Prentice Hall, 2009.
- Bemmels and Reshef, 1991. Manufacturing employees and technological change, *Journal of Labour Research*, 12 (3), pp. 231-246.
- Cheng, Joseph S. L. and Petrovic-Lazarevic, Sonja., 2004. The Role of Effective Leadership in Doing More with Less in Public Universities. Paper presented at *Global Business and Technology Association Sixth Annual Conference*, Cape Town, South Africa, June.
- Chew, Mindy Man Min, Cheng, Joseph S. L. and Petrovic-Lazarevic,, Sonja, 2006. Managers' Role In Implementing Organizational Change., *Journal of Global Business and Technology*, Volume 2, Number 1, Spring.
- Carnall, C.A., 2007. *Managing Change in Organization*, 5th Edition, Prentice Hall, London, UK.
- Eisenberger, R., Fasolo, P., & Davis-LaMastro, V., 1990. Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology*, 75: 51-59.
- Ellis, A. and Harper, R.A., 1994. *A new guide to rational living*, Wilshire Book Company, North Hollywood, CA.
- Giovanni Gavetti, Rebecca Henderson and Simona Giorgi, 2004. Kodak (A), February 18, 2004, Harvard Bussiness School.
- Hareli, S., & Rafaeli, 2008. A., Emotion cycles: On the social influence of emotion in organizations. *Research in Organizational Behavior*, 28, 35—59.
- Kotter, J. P., & Schlesinger, L. A., 1979. Choosing strategies for change. *Harvard Business Review*, 57, 106-114.

Liu, Y., & Perrewe', P. L., 2005. Another look at the role of emotion in the organizational change: A process model. *Human Resource Management Review*, 15, 263—280.

Mabin, Victoria J., Forgeson, Steve and Green, Lawrence. 2001. Harnessing resistance: using the theory of constraints to assist change management. *Journal of European Industrial Training*, 25(2/3): 168-191

Mullins, L. J., 1999. *Management and organisational behaviour* (5th ed.). London: Financial Times/Prentice Hall.

Rieley and Clarkson, 2001. *Organisational Change Management: A Critical Review*.

Srivastava et al, 2012. University of the future. A thousand year old industry on the cusp of profound change, Ernst & Young, Australia.

Vakola, M., Tsaousis, I., & Nikolaou, I., 2004. The role of emotional intelligence and personality variables on attitudes toward organizational change. *Journal of Managerial Psychology*, 19(2), 88-110.

Watson, G., 1969. Resistance to change. In W. G. Bennis, K. D. Benne & R. Chin (Eds.), *The planning of change* (2nd ed., pp. 488-498). New York: Holt, Rinehart & Winston.

Wittig, C., 2012. Employees' Reactions to Organizational Change, *Od Practioner*, vol. 44, No.2.

Zeffane, R., 1996. Dynamics of strategic change: critical issues in fostering positive organizational change. *Leadership & Organization Development Journal*, Vol.17, No.7.

Ankowska, Ania¹: Local Enterprise Partnerships as New Private-Public Entities that are Capable of Promote Growth via Entrepreneurial Governance

Abstract: *Due to the age of austerity, public sector belt-tightening and diminished capacity to deliver governance has become more concerned with identification of potential ways to boost economic growth. This abstract explores the paradigm of the entrepreneurial governance in the form of public-private partnerships, Local Enterprise Partnerships and their decisive role in pursuit of public goals where the entities are not homogenous and function in various shapes, forms and partnerships providing a lens to governance in today's world where 'governance through partnerships is the modern orthodoxy of entrepreneurial politics' (Pugalis & Bentley 2013 p.12). Nowadays government is not perceived as the single decision making entity any longer and instead has a fading capability to govern. The swing from managerialism to entrepreneurialism has resulted in governments being involved in more actively in enterprise initiatives and discovering other proactive means to promote the economic growth, that aim to stimulate the strategic development across the local authority boundaries presenting the case study of the North East region in the UK. Although the research investigates local-specific practises, it is believed that the ways of governance are changing on a global scale hence the study can provide insights on new modes of power and a good starting point for future investigation.*

Introduction

Growth theories argue that economic growth is determined by a three-fold classification of factors- geography, trade and institutions (Rodrik *et al* 2002). Obviously, the significance of each of them has been subjected to a fierce debate, but no superiority of one particular strand has been established. However, it must be agreed that in the light of the economic and financial downturn, out of the mentioned three strands one is believed to be more important than the remaining three- namely the quality of institutions is argued to be the trigger of the economic development which overrides the two remaining determinants.

Owing to the age of austerity, public sector retrenchment and rising demand with the diminished capacity to deliver, urban governance has become progressively more concerned with identification of new ways that have potential to boost development and employment growth. Quoting Pugalis & Bentley (2012), 'governance through partnerships is the modern orthodoxy of entrepreneurial politics'. This research project explores the paradigm of entrepreneurial governance where the entities are not homogenous and the bodies function in various shapes, forms and partnerships providing a lens to governance in today's world. In the light of the changing scenario, these long-established public-private partnerships and the new mechanisms for delivering broader social, cultural, environmental, economic and political objectives remain in the spotlight of critical academic, political and

¹ ania.ankowska@hotmail.com, Northumbria University, Newcastle, Poland; Krakow University of Economics, Poland

business attention and by many were named as the remedy for the economic downturn. As a result of the resurgence of the spatial entrepreneurship amalgamating public and private interests has had a notable impact on policymaking on the local, regional, national and transnational levels (Tallon 2013; Rodgers 2013).

Since David Harvey's (1989) analysis of the transformation in governance from managerialism to entrepreneurialism, some powerful political, economic and environmental shifts have taken place. However, the preoccupation of policy-makers with economic growth and fixation on wealth generating instruments has not waned, but has continually exaggerated. The paper charts the nature of entrepreneurial governance through examination of English economic development practice following the formation of the Local Enterprise Partnerships (LEPs). Putting into practice the urban regeneration projects become highly complex where multiple actors from different spheres of influence or prerogatives come together to deliver shared objectives, creating an uneasy relationship, promoting the role of local businesses where *"the role of private business interests appear to have been granted a privileged position, which accord with notions of neoliberalism and entrepreneurialism"* (Pugalis & Bentley 2012).

Shortly after the global economic crisis hit, it has become commonly believed that the British economy could not stay hale and hearty under the old institutional arrangements as the conditions to do so were no longer favorable. As the previous spatial arrangements (Regional Development Agencies) have even augmented longstanding inequalities with regards to economic and social conditions across the UK (Bellini *et al* 2012) and the imbalances have further been exacerbated by the recession (Clifton *et al* 2009), it soon became understood that a better, balanced and diversified economy featuring the right institutional conditions and policies enabling entrepreneurs and future companies to create jobs and growth, supporting businesses with relation to skills and infrastructure not dependent on a single sector of economy was needed (Ward & Hardy 2012). Understanding the need for diversification, the Coalition Government has introduced a radical urban policy change forming the Local Enterprise Partnerships (LEPs). LEPs were introduced as entities capable of creating private-public coalitions of local actors, led by business interests that would determine locally relevant policy for self-defined spatial units, *"expected to adapt, respond and mobilise whatever resources they have by operating outside the formal spaces of government, but crucially filling-in the softer spaces of governance 'where things get done'"* (Pugalis & Bentley 2012 p.13). The emergence of these unique governance entities aimed at helping government to deliver economic priorities and function as 'growth coalitions' between business leaders and local politicians. 39 LEPs were formed following the functional economic geographies, not the administrative boundaries scheme that used to be the case under the previous arrangements, RDAs. LEPs are type of multi-scalar governance arrangements (Bentley *et al* 2013), contemporary entrepreneurial governance entities that are expected to run outside of the traditional schemes. The new entities were established to reflect the Government's ambition for locally-driven growth, encouraging business investment, promoting economic development (DCLG 2011) and creating more opportunities for communities' voices to be heard. This

particular arrangement of LEPs has been decided upon as it potentially allows for enterprise and creativity and spatial diversification (Bentley *et al*, 2013).

Aim of the Project

The main purpose of the abstract is to introduce LEPs as new modes of private-public partnership working that stimulate the strategic development across the local authority boundaries presenting the case study of the North East region in the UK. These voluntary networks have been put in a challenging position bearing in mind rather unfavourable economic milieu. With the finite delivery powers, LEPs aim to unite businesses, public and community interest and promote the economic regeneration and growth of sub-regional territories.

The paper examines the roles performed by non-governmental interests providing the empirical lens to understand the contemporary role of private interests in the pursuit of public goals in order to deliver the economic growth. Furthermore, motives, strategies and objectives of the entrepreneurial governance are investigated. The findings are of interest to a diverse array of societal actors, such as businesses and policymakers, not only to the world of academia. The project contributes to the trans-disciplinary look at the contemporary challenges via evaluation of a new form of spatial strategies- LEPs. This project examines the changing face of entrepreneurial governance in the form of prevalent public-private partnerships and helps to fill a conceptual and empirical gap by examining the roles performed by business interests in the pursuit of public on a case of the United Kingdom.

Hypothesis and Methodology

The paper is grounded in empirical research conducted during 2012-2013 periods during which 18 interviews were conducted with key participants including local authority officers, regional representatives and business representatives. The abstract argues that the new entities are in power to guarantee welfare, wealth and work and stimulate growth across the local boundaries. Government expects the new bodies to 'rebalance the economy' with no specific guidelines put in place. This permissive approach provides room for manoeuvre on the local level. LEPs create the new functional spaces facilitating cooperation between various actors putting businesses at the heart of a new strategic vision. However, the research will now be extended and the newer trends with relation to the capacity of LEPs to deliver economic progress will be evaluated. Since the last research was conducted, the government came into terms with the fact that with no funding and no statutory powers LEPs will not be able to cure the economic scenario and empower the entities in resources needed. Since the topic is fairly new, it provides a great scope of research on local and regional economic development. The student aims to conduct both, focus groups and interviews with the selected group of participants. Moreover, an online survey will be conducted.

Results

In the light of current economic downturn the private-public partnerships are more and more often quoted as a remedy for the adverse climate. However, these entities cannot be perceived as newborn occurrence and they have been deeply

entrenched in contemporary policy systems around the world as the “*multidirectional dispersal of governing activities has occurred*” (Pugalis & Bentley 2012, p.15).

Findings of the research add to the understanding on the topic of private-partnerships and their linkages with various actors and structures. The results of the study are believed to be of interest to a diverse array of actors both in the private and public sectors concerned with urban regeneration and development, as well as those within the academy concerned with similar issues.

A specific character of the structure that has been adapted illustrates how various actors can be motivated to support reforms towards a new growth path development strategy and its feasibility. LEPs cannot be regarded neither as bottom up nor top down initiative, their structure is about this attribute, this ‘catalyst it has got in the middle’ which tends to listen to the local area and at the same time offering the LEPs the chance to really strengthen the relationship with the central government. These new arrangements are believed to be capable of leveraging the burdens of the economic crisis and contributing to promotion of the sustainable and inclusive growth in the face of the current financial scenario, not limiting their applicability to the British scenario only.

Summary

The swing from *managerialism* to *entrepreneurialism* has resulted in governments being involved in more actively in enterprise initiatives and discovering other proactive means to promote the economic growth. Furthermore, the shift to entrepreneurialism as an economic growth strategy has contributed to the awareness of entrepreneurial city on a large scale and hence promotion of economic competitiveness.

In the current era, government is not perceived as the single decision making entity anymore. The authority and capacity to govern is diminishing, and the power to formulate and implement policy and to realize development goals is not as prevalent and single-orientated as it used to be. Its (self-) rule has been taken over by partnerships that apply multi- scale, polycentric power models. The mentioned entities allow for the cooperation of various bodies where a large number of stakeholders in different institutional settings contribute to policy and efficient management.

References

Bellini N A, Danson M, Halkier H, 2012, Regional Development Agencies- The Next Generation? Networking, Knowledge and Regional Policies, Regional Studies Association, Routledge, Oxon

Bentley G, Pugalis L, Ankowska A and Shutt J, 2013 *Mobilising Regions: LEPs as Entrepreneurial Governance and Innovative Practice?* In Mobilising Regions: Territorial Strategies for Growth, Regional Studies Association Conference Proceedings of the Winter Conference November 2013

Clifton J, Dolphin T, Reeves R, 2009, Building a Better Balanced UK economy: Where will jobs be created in the next economic cycle, Institute for Public Policy Research, Tomorrow’s Capitalism Series

DCLG (Department for Communities and Local Government, 2010, Local Enterprise Partnerships (Cable-Pickles letter). Available online at <http://www.communities.gov.uk/documents/localgovernment/pdf/1626854.pdf>

Pugalis, L & Bentley, G 2012 *The Changing Business of Entrepreneurial Governance: An Examination of English Practice. ISBE 2012 Conference - Creating Opportunities through Innovation: Local Energy, Global Vision*. Dublin

Rodgers D 2013, *From Entrepreneurialism to Managerialism? Urban Authorities and the Managerialist Underside of Neoliberalism*, volume 58, 2013 AAG Annual Meeting, Los Angeles, California

Rodrik A, Subramanian A, Trebbi F, 2002, *Institutions Rule: The supremacy of Institutions over geography and Integration in economic development*, NBER Working Paper No. 9305

Tallon A, 2013, *Urban Regeneration in the UK*; 2nd Edition, Routledge, Oxon

Ward M, Hardy S, 2012, *Changing Gear- is localism the new regionalism?* The Smith Institute and Regional Studies Association, London

***Britze, Nils M. A.*¹: Analyzing Economic Decisions in Organizations and Demographic Change: a New Institutional Economics Approach**

Abstract: *This research project aims to explore institutions and external factors that contribute to or inhibit the implementation of age management strategies within organizations. The New Institutional Economics (NIE) is used as the predominant research framework to define research objectives and to explain patterns of institutional change as well as institutional inertia. Quantitative and qualitative methods will be used to address multiple levels of institutional analysis relevant to economic behavior and demographic change. Overall, the dissertation aims to provide further insight about the action and inaction of organizations. Such behavioral insight is relevant for the micro and macro levels of the economy and is connected to research on demographic change, economic behavior of organizations and institutional analysis.*

Introduction

Demographic change is a key challenge for organizations² operating in high-income economies. Age management strategies – consisting of measures for job recruitment (and job exiting), training, development and promotion, working practices, job design, and corporate culture with the aim to tackle age barriers and age discrimination within organizations – have been developed in order to adjust organizations to an older and more diverse workforce in the future. Although businesses have to respond to an aging and shrinking labor force in order to stay competitive and innovative (Walker 2005: 691ff.), compensatory strategies (such as age management) have hardly been implemented (Leber et al. 2013: 4).

This inaction to implement age management strategies within businesses is the starting point of this research project. The primary research question is: Which institutions and external factors contribute to the implementation of compensatory strategies and what are the reasons for institutional inertia regarding demographic change? NIE is the most relevant guide for explaining the theoretical aspects of this research because it contributes to a better understanding of current demographic challenges for organizations.

Aim of the Project

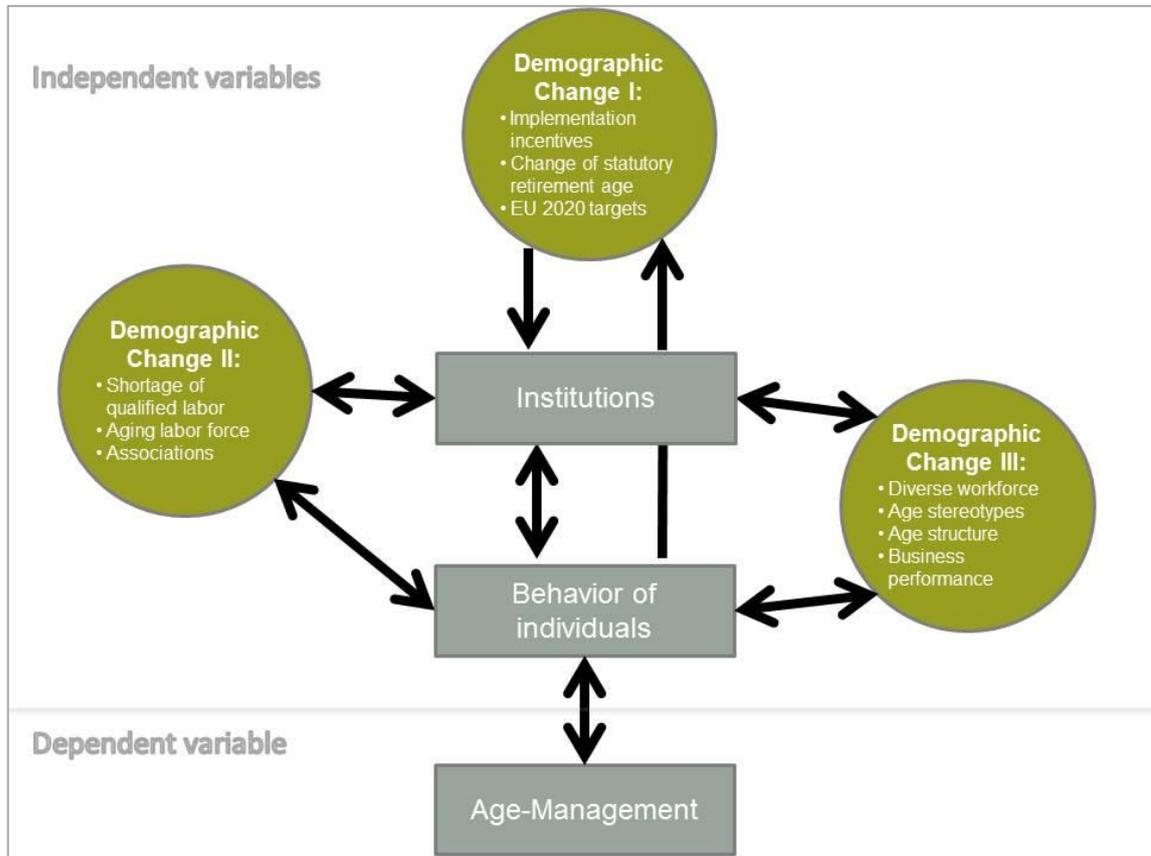
The dissertation aims to fill a research gap and develop a comprehensive approach to explain why some organizations are dealing with demographic change and others are not. According to NIE, there are three levels of institutions relevant to consider when analyzing behavior of individuals within organizations: “institutional environment”, “inter-organizational governance”, and “intra-organizational governance”. These three institutional levels correspond with

¹ nils.britze@srh-hochschule-berlin.de, SRH Hochschule, Berlin, Germany

² Organizations “...are groups of individuals bound by some common purpose to achieve objectives” (North 1990: 5).

Demographic Change I, Demographic Change II, and Demographic Change III as shown in figure 1.

Figure 1. Demographic Change and Institutional Levels



Source: Adapted from Söllner 2008: V, and altered by the author.

The figure shows how driving factors related to demographic change can affect institutions, decisions of individuals and therefore business strategies. This institutional perspective is the first step towards understanding the relevant factors for the implementation of age management strategies.

Therefore, Demographic Change I is seen as an important factor that influences institutions. For instance, European governments recently reformed policies directed at both employees and employers. Despite such reforms, individuals do not follow formal rules or governmental objectives if there are incentives to deviate and if there is no assurance that the rules will be enforced (Söllner 2008: 76). Philip Taylor for example points out that anti-age discrimination laws could even have a counterproductive effect (2002: 39).

Furthermore, Demographic Change II is relevant to consider when firms need to decide on the implementation of age management strategies. Labor markets are a factor that could impact the implementation of age management strategies. In markets with skilled labor shortfalls (and therefore high market transaction costs¹ due to search or information costs) the implementation of compensation strategies

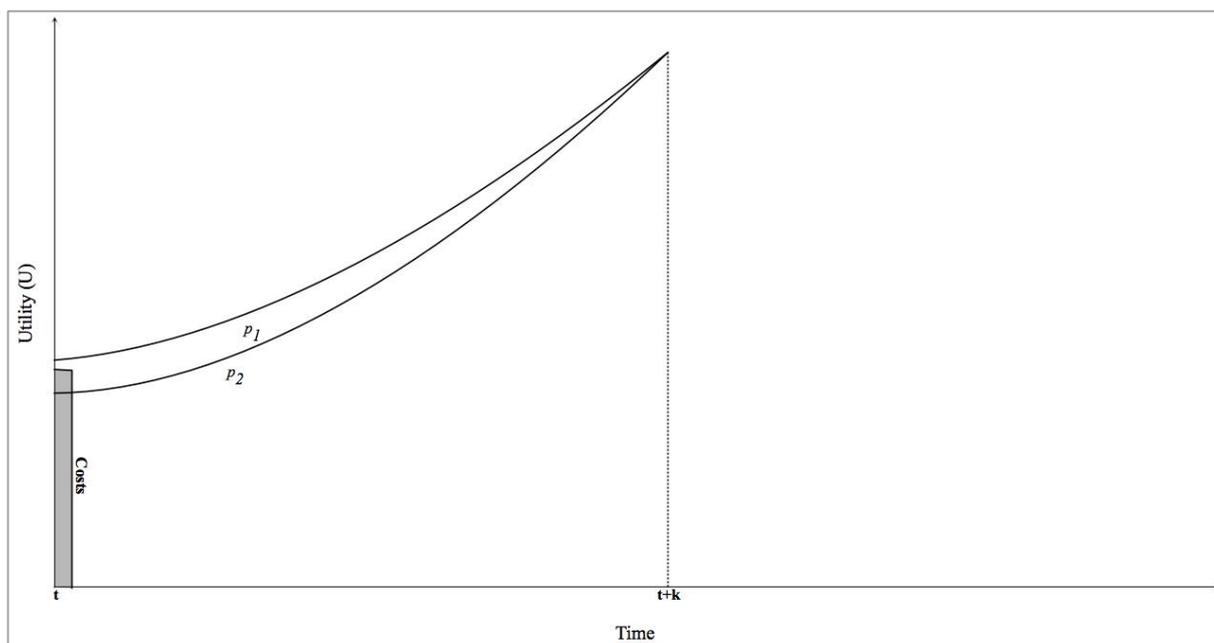
¹ "Transaction costs are the costs of establishing and administrating business relationships within and between firms and individuals" (Lafontaine and Slade 2013: 965).

could be more likely.¹ This assumption corresponds with Ronald Coase’s view that a transaction is carried out by an organization when transaction costs in firms are lower than in the market (Coase 1937: 392).

At the same time, Demographic Change III is important to consider. Explicit age issues within the workforce, business performance and age stereotypes seem relevant to consider when analyzing the responses on an aging and shrinking labor force. In addition, the NIE could offer, on the business level, a more comprehensive picture and identify factors for institutional change and reasons for inertia (Söllner 2002: 2). Therefore, institutional misfits² and differences in internal transaction costs (e.g. learning costs) could be included as reasons for different actions between organizations.

These driving factors and institutions within and outside of an organization have impact on decisions of individuals. Figure 2 pictures the current and future utility³ of the implementation of age management strategies for a decision maker within an organization. Implying that there is a current level of utility (at point t) and a future level (at point t+k) because expected negative impact of demographic change (loss of knowledge or shortage of qualified labor) is in the future (Britze 2013: 30f.).

Figure 2. Current and future utility of age management strategies



Source: Britze 2013: 34

The individual’s utility at point t is the sum of the immediate utility and the discounted future utility of age management strategies:

¹ Research conducted by Lutz Bellmann and Ute Leber (2011) indicate a positive relationship between shortage of skilled labor and trainings offered to older employees by organizations.

² An institutional misfit occurs when “...existing rules and regulations are preventing members of the organization to carry out the necessary activities” (Söllner 2002: 2).

³ The New Institutional Economics approach requires the application of methodological individualism to the research. Therefore, age management measures within an organization are implemented if the expected utility for a decision maker is higher than its costs.

$$U^t(a_t, \dots, a_T) = \sum_{k=0}^{T-t} D(k) u(a_{t+k})$$

with

$$D(k) = \left(\frac{1}{1+p}\right)^k$$

The discount function $D(k)$ is a crucial part of the discounted utility function U^t and contains a discount rate (p) in the denominator. This research assumes that:

if driving factors are high and institutions are in place that encourage the implementation of age management strategies, the discount rate will be low (path with p_1 in figure 2),

or if the driving factors are low or institutional misfits exist, the discount rate will be high (path with p_2 in figure 2).

The discount function includes as well the variable k for the time perspective which leads to the assumptions that:

if expected negative impact of demographic change is in the near future, the implementation of age management is more likely,

or if expected negative impact of demographic change is in the distant future, the implementation of age management strategies is less likely.

Therefore, the dissertation project includes contributions of previous research but distinguishes itself in many ways from existing analyses. This distinction will be represented as well in the design of the research method.

Hypotheses and Methodology

The described research design requires a multi-method approach in order to analyze economic decisions in organizations. Following working hypotheses are derived from theory and previous research, and will be tested:

H 1: Shortage of qualified labor has a positive effect on the implementation of age management strategies.

H 2: Good business performance has a positive effect on the implantation of age management strategies.

H 3: Expected difficulties to fill vacancies have a positive effect on the implementation of age management strategies.

H 4: Stereotypes and age discrimination hinder the implementation of age management within organizations.

H 5: The age structure of the organization has an impact on the implementation of age management strategies. The older the work force, the higher the age management implementation rate.

H 6: State-policy incentives encourage the implementation of age-management strategies in organizations.

H 7: Expected negative impact of demographic change on organizations drive the implementation of age management strategies.

In a first step, a quantitative design will be applied to the research question. Data from the IAB Establishment Panel of 2011 ($n= 15.556$) can be used to investigate correlations between driving forces, institutions and action of organizations. The survey included a question on the age structure of the

establishment (item 31), the type of age management measures (item 32), the current and expected shortage of skilled labor (item 33, 34, 35, 44, 47, 48), the type of measure to ensure enough skilled employees in the future (item 37), and forms of training (items 71, 74). Inferential statistics will be applied to find relationships between independent and dependent variables. Furthermore, it is the intention of the researcher to identify during the dissertation further national surveys to test the findings for transnational validity.

In a second step, a qualitative research will be conducted. The qualitative design is an important addition to the quantitative analysis and enables the linkage to institutions and transaction costs as reasons for inertia. In particular, the operationalization of transaction costs on the inter- and intra-organizational level due to organizational learning costs and age discrimination can be considered through qualitative research. The design of the qualitative questionnaire will build on results and knowledge gained throughout the quantitative research and will address remaining open questions.

Results

It is expected that high market transaction costs will lead to further implementation of age management strategies. Furthermore, it is expected that internal transactions costs due to age discrimination and institutional misfits can explain differences of actions between organizations. It seems likely that expected value and utility of the decision maker towards age management strategies are also important to consider.

References

Bellmann, L. & Leber, U. (2011): Betriebliche Weiterbildung Älterer als Strategie zur Sicherung des Fachkräftebedarfs. *Sozialer Fortschritt*, Bd. 60, H. 8, 168-175.

Börsch-Supan, A. (2013). Mikro- und makroökonomische Dimensionen des demografischen Wandels. In: Hüther, M. & Naegele, G. (Eds.), *Demografiepolitik - Herausforderungen und Handlungsfelder*, Wiesbaden, 96-122.

Britze, N. (2013). Staatliche Lösungsstrategien zum Abbau des unternehmerischen Handlungsdefizits im demografischen Wandel. In: Friedrich-Ebert-Stiftung: *Demografie und Wachstum in Deutschland - Perspektiven für wirtschaftlichen und sozialen Fortschritt*. Bonn, 27-42.

Büsch, V. (2012). From early retirement schemes to extending work life – a new paradigm in Germany - Peer Review on “Extending Working Life: The tripartite cooperation and the role of the Center for Senior Policy”, Mutual Learning Programme.

Büsch, V., Bruschi, M. & Britze, N. (2012). Entwicklung von Personalstrategien für eine verlängerte Lebensarbeitszeit in KMU zur Kompensation der Auswirkungen des demografischen Wandels. In: Meyer, J.-A. (Ed.), *Personalmanagement in kleinen und mittleren Unternehmen – Jahrbuch der KMU- Forschung und-Praxis*. Köln: Josef EIL VERLAG GmbH, 93-110.

Coase, R. H (1937). The nature of the firm. *Economica*, 4, 386-405.

Lafontaine, F. & Slade, M. E. (2013). Inter-Firm Contracts. In: Gibbons, R. & Roberts J. (Eds.), *The Handbook of Organizational Economics*, Cambridge: Cambridge University Press, 958-1013.

Leber, U., Stegmaier, J. & Tisch, A. (2013). Wie Betriebe auf die Alterung ihrer Belegschaften reagieren. *IAB-Kurzbericht*, 13/2013.

Morse, J. M. (2003). Principles of mixed methods and multimethod research design. In: Tashakkori, A., Teddlie, C. (Eds.), *Handbook of mixed methods in social and behavioral research*, Sage Publications, 189-208.

North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University Press.

Ostrom, E. (2007). Institutional Rational Choice: An Assessment of the Institutional Analysis and Development Framework. In: Sabatier, P. A. (Ed.), *Theories of the Policy Process*, Boulder, Colo.: Westview Press, 21-64.

Söllner, A. (2002). *The Problem of Dirty Hands – Individual Behavior in Cases of Institutional Misfit*. Germany: Westfälische Wilhelms-Universität Münster.

Söllner, A. (2008). *Einführung in das Internationale Management: Eine institutionenökonomische Perspektive*. Wiesbaden: Gabler Verlag.

Sporket, M. (2009). *Organisationen im demographischen Wandel – Alternsmanagement in der betrieblichen Praxis*. Doctoral dissertation, Technical University Dortmund.

Taylor, P. & Walker, A. (1994). The ageing workforce: Employers attitudes towards older people. *Work, Employment and Society*, 8(4), 569-591.

Taylor, P. (2002). *New Policies for Older People*, Bristol: The Policy Press.

Taylor, P. (2013). Introduction: older workers in an ageing society. In: Taylor, P. (Ed.), *Older workers in an ageing society – Critical topics in Research and Policy*, Cheltenham: Edward Elgar, 1-16.

van Stolk, C. (2012). Impact of the recession on age management policies (Résumé). Eurofound.

Walker, A. (2005). The emergence of age management in Europe. *International Journal of Organisational Behaviour*, 10, 685-697.

Williamson, O. E. (2000). The New Institutional Economics: Taking Stock, Looking Ahead. *Journal of Economic Literature*, 38, 595-613.

Bryukhanov, Maksym¹: Do Girls Shy Away From Competitive Specialties?

Abstract: *The paper (research proposal) is devoted to an empirical study of the gender differences in the choice of competitive specialties in tertiary education. We propose a methodology to quantify the impact of marriage expectations on individual specialty choice and on individual willingness to take part in competition. Our study uses both survey and experimental data as well as utilizes IV estimation and priming. Results of the study can be used by government institutions in transition economies in the policy of financial support to university students and households.*

Introduction

The gender gap started to decline from 1890. However, it is still present, especially in competitive positions and specialties. A striking difference was found in US by Bertrand and Hallock (2001). They documented that only 2.5% of the five highest paid executives are women. According to a recent European Executive Summary (2012), one woman out of ten men can be detected to be a top manager in OECD countries. Moreover, as documented by Cadsby et al. (2013) women also earn less.

Some economists blamed the family (e.g., Bicakova, 2012), some scientists tried to detect objective discrimination against mothers (e.g., Corell, 2007).

One way or another, empirical evidence about admission gap is not so wide spread. An interesting finding was documented by Jurajda&Munich (2008). They show that girls do not shy away from competition, when they apply to more competitive specialties, but perform significantly worse, when competition is very tough and the process of admission is very selective.

From the other side, it is natural to assume that women's educational choice is driven by the set of factors. Traditionally, one of the most important factors is her expectation about marriage. Since the time is scarce, a tradeoff between career and marriage exists²; thus, familiar economic reasoning may be applied and hypothesis may be tested.

Practical importance of the question comes from the fact that in recent years governments of some countries (Ukraine, Russia) implement restructuring of educational policy, actively introducing distance learning, dual specialties and so-called second education for persons, who are unemployed with their first specialties. Hence, policy recommendations for smoothing and optimization of female education will be given based on the empirical evidences of our paper.

In the most recent empirical and experimental paper of Buser et al. (2013) girls turned to shy away from competitive tracks in high school as well as from an experimental tournament. In contrast to this finding, Cadsby et al. (2013) stated psychological argument. It is a common knowledge in psychological literature that

¹ MBryukhanov@gmail.com, International Laboratory for Institutional Analysis of Economic Reforms, National Research University Higher School of Economics, Moscow, Russia

² Of course, the fact of marriage does not necessary hurt career in developed countries. However, our story and experiment will be about post-Soviet countries, where (in most cases) cultural tradition forces women to have some babies after her marriage and to shy out from career and professional development.

people have different identities and many different stereotypes. These stereotypes can be changed (activated) by an external shock. Practically speaking, an identity may be activated by a special procedure, which is called priming. Basically, it is the set of exercises (perceptions) that stimulate activation of, let say, a female identity, a masculine identity or a professional identity. Using priming, Cadsby et al. (2013) documented that girls did not shy away from competition. It was inferred from female willingness to participate in experimental tournament. However, it is not clear for how long this priming effect persists and realizes in everyday life. Secondly, given the temporary character of priming, it is not clear how can we interpolate these results on career choice and labor market in general. Moreover, it is natural to assume that gender identities come from the family, and the most identifiable signal of it is female expectations of marriage. Recent macroeconomic empirical literature (e.g., Attanasio&Kaufmann, 2012) documents the influence of marriage expectations on college education choice, but will it be true in the case of individual choice between tertiary specialties?

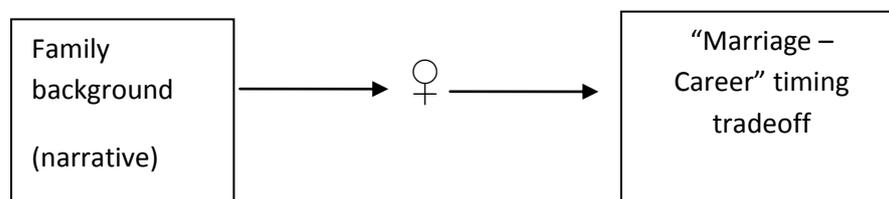
Aim of the Project

The project is aimed at explanation of the gender differences in the choice of competitive specialties in higher education. In particular, we are going to quantify the effect of female marriage expectations on specialty choice. Doing so, we hope to reveal the driving force of female educational choice. Our study contributes to existing state of the art with introduction of IV approach, which can potentially solve the problem of marriage expectations endogeneity. Our approach utilizes both survey and experimental data, which allow us to obtain results which will be externally valid and elicit the role of marriage expectations in individuals' decisions to take part in competition.

Hypotheses and Methodology

We assume the following underlying mechanism of influence in our empirical exercise:

Figure 1. Underlying mechanism of the model



The later is expected time (age) of marriage (E), the more free time a girl has for career development and the more competitive specialty she will choose. The sooner is the estimated time of a girl's marriage, the lower is her propensity to participate in competitive tasks.

In our estimation we will use the following approach. Denoting by (S = 1), the enrollment decision to more competitive specialty (in a particular University), the first equation of interest is the following:

$$S = 1 \Leftrightarrow S^* = \alpha + \beta_0 E + \beta_1 \text{Gender} \times E + X' \gamma + \varepsilon > 0,^1 \quad (1)$$

where:

E – is individual expectation about the age of marriage (in years).

X – is the set of individual socio-economic characteristics, excluding gender.

Since the equation belongs to a class of a discrete choice model, the estimation technique will be according to standard treatment of probit/logit models, described in Cameron et al. (2005)

One can argue in this context that expectations about marriage are endogenous. They can be driven by various factors such as self-confidence in beautiful appearance and other important parameters, family background etc. These factors are not controlled for in (1); therefore, one can expect biased estimates of coefficients.

To be confident in the presence in endogeneity we will run Durbin-Wu-Hausman test, described in Wooldridge (2008).

To overcome the issue of endogeneity, we propose to utilize IV estimation technique.

$$E = a_1 + a_2 I + u, \quad (2)$$

where: I is an instrument for E .

Recently, we have two candidates for an instrumental variable on the first stage. The first one is a composition of siblings. It is shown by Vogl (2013) that in the case of 2 daughters the family “pushes” the first daughter to marry earlier, because parents need resources and time to arrange the marriage of the second daughter. This effect is absent for a pair “sister-brother” or “brother-brother”, and it is mentioned that a younger sister increase the marriage risk of an older sister.

Slightly modifying the methodology of Vogl (2013), for an individual i and sibling composition (j) in our case equation (2) becomes:

$$E_i = a_1 + a_2 \text{Sisters}_{ij} + u_i, \quad (2')$$

where:

$$\text{Sisters}_{ij} = \begin{cases} 1, & \text{if a girl has a younger sister} \\ 0 & \text{otherwise} \end{cases}$$

We expect the lower expected age of marriage in the case of having a younger sister. When we consider subsample of girls only, the equation (2') will be estimated for a girl i correspondingly.

One may argue here that, potentially, competition for resources between girls may result in violation of exclusion restriction. However, according to the evidence by J.Behrman (1997) daughters tend to receive more finance for human capital investments, then sons. Therefore, if a daughter has a sister, rather than a brother,

¹ In the case of engaging students from different years of study we will also account for cohort fixed effects (using dummies). If we pool all observations from all universities we will also control for a University fixed effects.

then she will have both lower expectation of marriage and lower outlays on human capital, thus the estimated coefficient is a lower bound.

The next potential instrument is mother's age of marriage. According to Van Bavel et al. (2009) there is a statistically significant relationship between mother's marriage age and marriage age of daughters. The study was concerned rural Holland in 1850-1940. However, given persistent cultural roots of a typical Ukrainian family, and the tradition of timing girls' marriage according to mother's age of marriage, we assume this instrument will be consistent. Currently we do not study the literature, dealing with boy's age of marriage, so we proxy its determinant by father's marriage age. When we use subsamples of girls (see below) this aspect is not a problem at all.

If a problem of weak instrument arises we will conduct a Hausman test for weak instruments, following the methodology of Hahn et al. (2011), Stock and Yogo as it is described in Baum (2006).

As an additional quantitative exercise we conduct estimation of determinants of participation in competition, according to the experiments of Buser et al. (2013). To infer the strength of marriage expectations we can compare it with the priming exogenous shock, introduced according to the methodology of Francesco D'Acunto (2014).

The following set of hypothesis is subject to be tested empirically:

H1 – an increase in horizon of getting married positively influences probability of choosing competitive specialty by females.

H2 – an increase in horizon of getting married positively influences probability of choosing competitive scheme of compensation in pay tournament.

H3 – the effect of marriage expectation is greater, than the effect of priming.

Expected Results

In our study we hope to quantify gender differences of participation in competition and gender differences in the choice of tertiary specialties. Particular emphasize will be devoted to the identification and estimation the effect of female marriage expectations on specialty choice. Judging from the analytical psychology grounds, we believe that female marriage expectations is not a small brick, but a cornerstone of educational choice as well as of willingness to participate in competition, which can be luckily observed and explained, using IV approach. We hope that experimental data also allow us to quantify the determinants, which have a direct effect on individual willingness to participate in competition.

Results of the study can be used by government institutions in transition economies in the policy of financial support to university students and households.

References

Attanasio O., Kaufmann K. (2012). Education Choices and returns on the labor and marriage markets: evidence from data on subjective expectations. University of Bocconi. (http://didattica.unibocconi.it/mypage/dwload.php?nomefile=Educational_Choices_Marriage20121125145031.pdf last access 07.04 4-10)

Bertrand M., Hallock K. (2001). The gender gap in top corporate jobs. *Industrial and labor relations review*, LV, 3-21.

Baum C. (2006). An introduction to modern econometrics using Stata. Stata Press, 341 p.

Behrman J. Intrahousehold distribution and the family. (1997). In Handbook of Population and Family economics, edited by M.R. Rozenzweig and O.Stark, Elseiver Science.

Bicakova A. (2012). Gender Unemployment Gaps in the EU: Blame the Family. CERGE-EI Working Paper Series, WP 475.

Buser T., Niederle M., Oosterbeek H. (2013). Gender, Competitiveness and Career Choices forthcoming, forthcoming Quarterly Journal of Economics. (<http://https://dl.dropbox.com/u/633835/Website/Articles/Buser%20Niederle%20Oosteerbeek%20Career%20Choice.pdf>) and the 2012 version <http://www.stanford.edu/~niederle/BN0.QJE.pdf> last access 07.04 5-10)

Cadsby B., Servatka M., Song F. (2013). How competitive are female professionals? A tale of identity conflict. Journal of Economic Behavior & Organization, 92, 284-303.

Cameron C., Trivedi P. (2005). Microeconometrics: Methods and Applications. Cambridge University Press, 1001 p.

Corell S., Benard S., Paik I. (2007). Getting a job: is there a motherhood penalty? American journal of sociology, 112, 1297-1338.

D'Acunto F. (2014). Identity, overconfidence and investment decisions. HAAS working papers. (http://faculty.haas.berkeley.edu/francesco_dacunto/papers/genderTrade.pdf; last access 07.04 5-00)

Executive Summary. (2012). Closing the gender gap. Act now. OECD.

Hahn J., Ham J., Moon H. (2011). The Hausman test and weak instruments. Journal of Econometrics, 160 (2), 289-299.

Jurajda S., Munich D. (2008). Gender gap in admission performance under competitive pressure. CERGE-EI Working paper Series, WP 371.

Vogl T. (2013). Marriage institutions and sibling competition:evidence from South Asia. The Quarterly journal of economics 128 (3), 1017-1072.

Van Bavel J., Kok J. (2009). The impact of differential socialization on the intergenerational transmission of age at marriage: rural Holland 1850-1940. Working paper of the Scientific Research Community Historical Demography WOG/HD/ vol:2009 issue:10. (<https://lirias.kuleuven.be/handle/123456789/254229>; last access 07.04 5-02)

Wooldridge J. (2008). Introductory Econometrics: A Modern Approach. Cengage Learning, 896 p.

Datskova, Liudmyla¹: The Eurasian Union as a Mode of Integration for the Hybrid Regimes in the Post-Soviet Space: Characteristics, Reasons and Forecasts

Abstract: *The principal aim of the proposed research is to define to what extent the stability of the hybrid political regimes in the Post-Soviet area affects the process of integration within the framework of a new international institution, namely the Eurasian Union. The research will address two interlinked areas: hybrid regimes and their stability and general tendencies of international integration by post-Soviet countries. It will also seek to address in what way the state of the hybrid regime affects the ability of countries to integrate, as well as the direction of such potential integration. The secondary aims of the research are to consider future integrative developments within the region, to pinpoint the current stage of the transformational process of individual countries, to assess the stability of their current political regimes and to identify trends in the field of international cooperation. To achieve the stated aims, a wide-ranging methodology, consisting of mainly quantitative approaches, will be employed. In particular, content analysis and comparison will be made use of to analyse the state of the current political regimes. In addition, factor analysis, regression and coefficients of correlation will be utilised to analyse political stability, and to define the relationship between political stability and the process of integration, coefficients of correlation and regression will be relied upon. Broadly, it is hoped that a model of interpretation for determining the connection between the state of a political system and its method of international integration may be developed from the research findings upon completion of the project.*

Introduction

The idea of creation Eurasian Union in post-Soviet area has caused a lot of academic discussions. The chances to create such a union today become really low, although there is still a slight chance that such Union would appear and consolidate all the post-Soviet countries. The idea of the project is to analyse the most significant issues that may affect the creation of the Eurasian Union – the main accent will be made on the stability of the regime (the hybrid regime) and some other questions connected with the economical situation of the country its place on the international arena etc and create the model of interdependence between the state of political regime in the post-Soviet countries and the progress of Eurasian Union.

Aim of the Project

The aim of this research is to investigate forms of international integration of the post-Soviet countries, especially the latest form of integration, the Eurasian Union, as the only possible way for international collaboration of hybrid regimes in that area. The research will include an analysis of the stability of what have been termed 'hybrid regimes' (namely, political systems which have started their transformational process but have not yet consolidated democracy (Przeworsky

¹ ldatskova@hotmail.com, Jagiellonian University in Krakow, Poland

1996) and have been termed 'defective democracies' (Merkel 2004) and countries of the "grey zone" (Schmitter 1993)) and how they influence regional integration within the post-Soviet space. The stability of Ukraine, Belarus and Russia will be compared to hybrid regimes in Central Asia and the Caucasus. An attempt will be made to investigate why countries such as Kyrgyzstan or Kazakhstan are thought to integrate more easily into new international organisations in the region than, for example, Ukraine or Armenia. The Aim of the Project is to determine whether internal factors (e.g. place of the political elites, the role of the third sector, freedom of the press, etc. and, consequently, the stability of the hybrid regime itself) or external factors (e.g. economic dependence on Russia) are more important in the process of regional integration. A secondary aim is to suggest how international institutions such as the Eurasian Union could develop in the future and to speculate as to what might happen to previous forms of international integration, such as the Commonwealth of Independent States.

The following research questions will form the basis for the investigation undertaken:

Hybrid regimes and their stability: Which factors determine whether political regimes in the post-Soviet space are hybrid? Which factors affect the stability of these political regimes?

How does the stability of hybrid regimes in post-Soviet countries affect both their ability to integrate and the direction of integration? Are there any connections between the form of international integration in the region and the internal stability of the potential members? Do countries of the post-Soviet region tend to integrate with other hybrid regimes or do they instead try to co-operate with more developed societies? Could the 'Eastern' direction of international integration in the region be understood as a means of preserving the current political regime in the countries in question (especially in hybrid regimes, which are disposed to authoritarianism).

The Eurasian Union as the latest form of integration in the post-Soviet space: If the majority of the members of the organisation are hybrid, does it qualify the whole integration process as "hybrid"? Can the Eurasian Union be considered as a hybrid international organisation or quasi-organisation as a result of such "hybrid integration"?

Hypotheses and Methodology

The more stable the hybrid regime is, the more easily it integrates into international institutions. Countries with hybrid political regimes, which are disposed to authoritarianism, tend to integrate with Eurasian Union, while more democratic countries are trying to integrate with the West. If the Eurasian Union consists, on the most part, of hybrid regimes (both stable and instable), does it mean that the whole institution is hybrid? The Eurasian Union presents the only way for the hybrid regimes in the post-Soviet space to integrate (Dugin (2010), Matsyjevsky (2011)).

Working with the topic of hybrid regimes means employing the same methodology as for investigation into the transformation of political regimes. It means that for each country, an analysis of political and economic issues would need to be included in the research. Access to governmental databases of the countries' economic statistics (export, import, including fuel and gas, investments,

etc.), political information (political system, parliamentary terms, opportunities for the third sector, i.e. its real power), information on the relationship between politics and business, the role of the secret services and human rights will be necessary in order to carry out a comprehensive investigation.

All this information would help in developing an understanding of the stage at which the country is in terms of transformation and how deeply the framework of a hybrid regime is embedded. The information that is necessary in understanding the state of the hybrid regime of each country is freely accessible on government websites. Of course, there is a risk that such information may be biased. There are, however, some international databases that would be more objective. For example, Freedom House provides ratings of civil liberties and political rights. Freedom House rates countries on a scale from 1 (most free) to 7 (least free) on both those dimensions. Fund for Peace's Failed States Index assesses the pressures experienced by nations based on social, economic and political indicators such as demographic pressures, refugee flows, uneven economic development or severe economic decline, as well as human rights. The World Bank provides all the necessary information on the main economic indicators for almost all countries in the world. In addition, the Bertelsmann Foundation's Transformation Index has been documenting, since 2002, the progress 128 transformation countries have been making toward democracy and a market economy. The State Fragility Index provides annual state fragility, effectiveness and legitimacy indices and the eight component indicators for the world's 167 countries with populations greater than 500,000 and last but not the least, the Political Instability Index shows the level of threat posed to governments by social protest.

All these international indexes, together with the analysis of the rotation of national parliament members and some other factors, will help in understanding how legitimate, effective and valid the political regime is in a chosen country. Integration of three factors: legitimacy, effectiveness and validity (as established by Juan Linz (1996)), but also availability of the political system to the potential risks both internal and external, will show the overall stability of the political system.

To investigate the stability of a political regime, the current state of the chosen political system and how it affects the willingness of the country to cooperate with other countries, especially in comparison to the past, should be analysed. The key players in the region are all the same as they were earlier – all post-Soviet countries. Analysing the changes in the relations between these countries, for example between Ukraine and Russia, it may be found that in the past the relations were different. It may also be found that there is some dependence between the internal changes and external relations with regards to attitudes towards international cooperation in the region. It could be suggested that the Eurasian Union, as a new form of integration in the region, might be the only possible form of integration. To reach such a conclusion all previous attempts of international cooperation in the region should be analysed.

The research will be based on both theoretical and quantitative sources of information. An analysis of economic information requires the use of statistical approaches.

The literature concerning political instability has employed many different variables to reflect the unobserved concept of political instability. While every single

indicator probably reflects some information about political instability, none of them are perfect. In other words: political instability indicators contain measurement error. This problem has been acknowledged by various authors. To solve the measurement problem, researchers Venieris and Gupta (1985, 1986) have calculated one dimensional indexes using discriminant analysis. On the other hand, Alesina and Perotti (1996) used components analysis. Cukierman, Edwards and Tabellini (1992) tried to predict the propensity of government change using binary choice models in which the occurrence of government transfers is related to various economic, political and institutional variables.

In order to examine the multidimensional character of political instability, factor analysis would be employed. Although this method is similar to principal components analysis, the subtle difference is that the latter is a data reduction method to extract as much of the variance contained in a set of indicators, while factor analysis is based on a model and extracts only the information common to all indicators.

Using an exploratory factor analysis all dimensions of political instability (e.g. civil protest, politically motivated aggression, instability within the political regime and instability of the political regime etc.) could be identified.

Factorial analysis or regression is necessary in exploring the connection between export/import factors and electoral support of national strategy.

Regression toward the mean within its methodology would be used to analyse the connection between the independent factors that affect the stability of a political regime. To realize the aim of finding the interdependence between the independent factors, a wide range of instruments should be used, including the Mann-Whitney U-test (for the data measured statistically) and the χ^2 criteria (Pearson's chi-squared test) that helps to check the hypotheses of the independence of theoretical and practical observations. If the factors were to be ranked to analyse their interdependence, Spearman's and Kedall's correlation coefficient would be used, as both of them measure the extent to which, as one variable increases, the other variable tends to increase, without requiring that increase to be represented by a linear relationship.

Moreover, other statistical formulas can help in presenting the connection between the stability of a political system and the integration processes. A wide range of theoretical methods will be used, i.e. content-analysis (e.g. for the analysis of the national constitution) and the simple comparison of the present situation in each country with past events.

Results

As a result of the research, it is hoped that a model of interpretation may be established for determining the connection between the state of a political system and its method of international integration.

As a result it should become clear does the Eurasian Union still has chances to be formed in the post-Soviet area or the last wave of democratization process has caused that the final act of transition from the hybrid regimes towards democracies and European integration which means that the idea of post-Soviet reunion will have no chances to be realized.

References

- Alexander M., 2008. Democratization and Hybrid Regimes: Comparative Evidence from Southeast Europe. *East European Politics and Society*, no.22 (4).
- Arat Z., 1991. *Democracy and Human Rights in Developing Countries*. Boulder: Lynne Rienner Publishers.
- Aslund A., 2005. The Economic Policy of Ukraine after the Orange Revolution. *Eurasian Geography and Economics*, vol.46, no.1.
- Beissinger M., 1998. Nationalist violence and the state: political authority and contentious repertoires in the former USSR. *Comp. Polit.*, No. 30.
- Boogards M., 2010. Measures of Democratization: From Degree to Type to War. *Political Science Quarterly*, no. 63 (2).
- Boogards M., 2009. How to Classify Hybrid Regimes? Defective Democracy and Electoral Authoritarianism. *Democratization*, no. 16 (2)..
- Carothers T., 2006. The Backlash Against Democracy Promotion. *Foreign Affairs*, no.85 (2).
- Carothers T., 2002. The End of the Transition Paradigm. *Journal of Democracy*, no. 13 (1).
- Christensen R., Rakhimkulov E., Wise C., 2005. The Ukrainian Orange Revolution brought more than a new president: What kind of democracy will the institutional changes bring? *Communist and Post-Communist Studies*, vol.38, no.2.
- Collier D, Levitsky S., 1996. Democracy 'with Adjectives': Conceptual Innovation in Comparative Research. University of Notre Dame, *Helen Kellogg Institute for International Studies Working Paper*, no. 230.
- D'Anieri P., 2003. Leonid Kuchma and the Personalization of the Ukrainian Presidency. *Problems of Post-Communism*, vol.50, no.5.
- D'Anieri P., 2005. The last hurrah: The 2004 Ukrainian presidential elections and the limits of machine politics. *Communist and Post-Communist Studies*, vol.38, no.2.
- D'Anieri P., 2005. What Has Changed in Ukrainian Politics? Assessing the Implications of the Orange Revolution. *Problems of Post-Communism*, vol.52, no.5.
- Dahl R., 1971. *Polyarchy: Participation and Opposition*. New Haven: Yale University Press.
- Dahl R., 1992. The Problem of Civic Competence. *Journal of Democracy* , no. 4.
- Diamond L., 1995. *Promoting Democracy in the 1990s: Actors and Instruments, Issues and Imperatives*. Report to the Carnegie Commission on Preventing Deadly Conflict, New York: The Carnegie Corporation.
- Diamond L., 1994. Rethinking Civil Society: Toward Democratic Consolidation. *Journal of Democracy* , no. 3.
- Diamond L., 1993. The Globalization of Democracy. In: R. O. Slater, D. R. Schutz, S.R. Dorr, ed. 1993. *Global Transformation and the Third World*. Boulder: Lynne Rienner.
- Diamond L., 2005. The State of Democratization at the Beginning of the 21 Century. *The Whitehead Journal of Diplomacy and International Relations*, no.11 (1).
- Diamond L., 2002. Thinking about Hybrid Regimes. *Journal of Democracy*, no.13 (2).
- Diamond L., Linz J., Lipset S., 1988/1989. *Democracy in Developing Countries: Asia, Africa, and Latin America*. Boulder: Lynne Rienner Publishers.

Diamond L., Plattner M., 1994. *Nationalism, Ethnic Conflict, and Democracy*. Baltimore: Johns Hopkins University Press.

Diamond L., Linz J., Lipset S., 1995. *Politics in Developing Countries: Comparing Experiences with Democracy*. Boulder: Lynne Rienner Publishers.

Ekman J., 2009. Political Participation and Regime Stability: A Framework for Analyzing Hybrid Regimes. *International Political Science Review*, no.30 (7).

Fairbanks C., 2004. Georgia's Rose Revolution. *Journal of Democracy*, vol.15, no.2.

Guliyev F., 2005. Post-Soviet Azerbaijan: Transition to Sultanistic Semiauthoritarianism? An Attempt at Conceptualization. *Demokratizatsiya: The Journal of Post-Soviet Democratization*, no.13 (3).

Hadenius A., 1992. *Democracy and Development*. Cambridge: Cambridge University Press.

Hadenius A., Teorell J., 2006. *Authoritarian regimes: Stability, Change and Pathways to Democracy, 1972–2003* [pdf] Available at: <<http://nd.edu/~kellogg/publications/workingpapers/WPS/331.pdf>> [Accessed 30 August 2013].

Hadenius A., Teorell J., 2007. Pathways from Authoritarianism. *Journal of Democracy*, no. 18 (1).

Hale H., 2005. Democracy and Revolution in the Post-Communist World: From Chasing Events to Building Theory. *World Politics*, vol. 58.

Hassner P., 2008. Russia's Transition to Autocracy. *Journal of Democracy*, no.19 (2).

Held D., 1987. *Models of Democracy*. Stanford: Stanford University Press.

Herd G., 2005. Colorful Revolutions and the CIS. 'Manufactured' Versus 'Managed' Democracy?. *Problems of Post Communism*, vol.52, no.2.

Huntington S., 1991. *The Third Wave: Democratization in the Late Twentieth Century*. Norman, OK, and London: University of Oklahoma Press.

Inkeles A., 1991 *On Measuring Democracy: Its Consequences and Concomitants*. New Brunswick: Transaction Publishers.

Jong-A-Pin R., 2006. *On the Measurement of Political Instability and its Impact on Economic Growth*. University of Groningen.

Klobucar T., Miller A., Gwyn E., 2002. The 1999 Ukrainian Presidential Election: Personalities, Ideology, Partisanship, and the Economy. *Slavic Review*, vol.61, no.2.

Kudelia S., 2005. The Rise of Democratic Opposition in Ukraine: From Obscurity to Triumph. *SAIS Paper*, John Hopkins University.

Kuzio T., 2006. *'Directed Chaos' and Non-Violence in Ukraine's Orange Revolution*. Stockholm: Swedish National Defense College.

Kuzio T., 2005. Kuchma to Yushchenko: Ukraine's 2004 Elections and 'Orange Revolution'. *Problems of Post-Communism*, vol.52, no.2.

Kuzio, T., 2005. Regime Type and Politics in Ukraine under Kuchma. *Communist and Post-Communist Studies*, vol.38, no.2.

Kuzio, T., 2005. Revisiting the Orange Revolution, Parts One and Two: Considerable Gains. *Jamestown Foundation, Eurasian Daily Monitor*, vol.2, no.217 and 220.

- Kuzio T., 2003. The 2002 Parliamentary Elections in Ukraine: Democratization or Authoritarianism. *The Journal of Communist Studies and Transition Politics*, vol.19, no.2.
- Kuzio T., 1998. Ukraine: Coming to Terms with the Soviet Legacy. *The Journal of Communist Studies & Transition Politics*, vol.14, no.4.
- Kuzio T., 2005. Ukraine's Orange Revolution. The Opposition's Road to Success. *Journal of Democracy*, vol.16, no.2.
- Levitsky S., Way L., 2010. *Competitive Authoritarianism: Hybrid Regimes After the Cold War*. Cambridge: Cambridge University Press.
- Levitsky S., Way L., 2002. The Rise of Competitive Authoritarianism. *Journal of Democracy*, no. 13 (2).
- Lijphart A., 1977. *Democracy in Plural Societies*. New Haven: Yale University Press.
- Lindberg S., 2009. Introduction. Democratization by Elections: A New Mode of Transition. In S. Lindberg, ed. 2009. *Democratization by Elections: A New Mode of Transition*. Baltimore: The Johns Hopkins University Press.
- Linz J., 1978. *The Breakdown of Democratic Regimes: Crisis, Breakdown, and Reequilibration*, Baltimore: Johns Hopkins University Press.
- Linz J., 1996. Types of Political Regimes and Respect for Human Rights: Historical and Cross-National Perspectives. In: A. Eide, B. Hagtvet, ed. 1996. *Conditions for Civilized Politics: Political Regimes and Compliance with Human Rights*. Oslo: Scandinavian University Press.
- Linz J., Stepan A., 1996. *Problems of Democratic Transition and Consolidation: Southern Europe, South America, and Post-Communist Europe*. Baltimore: Johns Hopkins University Press.
- Lipset S., 1994. The Social Requisites of Democracy Revisited. *American Sociological Review*, vol.59, no. 1.
- Mansfield, E., Snyder J., 1995. Democratization and War. *Foreign Affairs*, vol.74, no. 3.
- Matsiyevsky Y., 2012. *Informal Institutions in Hybrid Regimes: the Case of Ukraine* Case UC Berkeley, Field Report.
- McFaul M., 2002. The Fourth Wave of Democracy and Dictatorship: Noncooperative Transitions in the Postcommunist World. *World Politics*, no. 54.
- McFaul M., 2005. Transitions from PostCommunism. *Journal of Democracy*, vol.16, no.3.
- Mendelson S., Gerber T., 2005. Soviet Nostalgia: An Impediment to Russian Democracy. *The Washington Quarterly*, vol.29, no.1.
- Merkel W., 2004. Embedded and Defective Democracies. *Democratization*, no.11 (5).
- Morlino L., 2009. Are There Hybrid Regimes? Or are They Just an Optical Illusion? *European Political Science Review*, no. 1 (2).
- Motyl A., 1997. Structural Constraints and Starting Points: The Logic of Systematic Change in Ukraine and Russia. *Comparative Politics*, vol.29, no.4.
- O'Donnell G., Schmitter P., 1986. *Transitions from Authoritarian Rule: Tentative Conclusions about Uncertain Democracies*. Baltimore & London: The Johns Hopkins University Press.

Ottaway M., 2003. *Democracy Challenged: The Rise of Semi-Authoritarianism*. Washington DC: Carnegie Endowment for International Peace.

Powell G., 1982. *Contemporary Democracies: Participation, Stability and Violence*. Cambridge: Harvard University Press.

Przeworski A., Alvarez M., Cheibub J., Limongi F., 1996. What Makes Democracies Endure? *Journal of Democracy*, no. 1.

Przeworski A., Limongi F., 1993. Political Regimes and Economic Growth. *Journal of Economic Perspectives*, vol. 7, no. 3.

Puglisi R., 2003. The Rise of the Ukrainian Oligarchs. *Democratization*, vol.10, no.3.

Sartori G., 1976. *Parties and Party Systems: A Framework for Analysis*. Cambridge: Cambridge University Press.

Schedler A., 2006. *Electoral Authoritarianism: The Dynamics of Unfree Competition*. Boulder: Lynne Rienner.

Schedler A., 2006. The Logic of Electoral Authoritarianism. In: A. Schedler, ed. 2006. *Electoral Authoritarianism: The Dynamics of Unfree Competition*. Boulder: Lynne Rienner.

Schedler A., 2002. The New Institutionalism in the Study of Authoritarian Regimes [pdf] Available at: <<http://www.cide.edu/publicaciones/status/dts/DTEP%20215.pdf>> [Accessed 23 August 2013].

Schmitter P., 1994. Dangers and Dilemmas of Democracy. *Journal of Democracy*, no.5 (2).

Schmitter P., 1993. The International Context of Contemporary Democratization. *Stanford Journal of International Affairs*, no. 1.

Schmitter P., Lynn K., 1991. What Democracy Is...and Is Not. *Journal of Democracy* vol.2, no. 3.

Schumpeter J., 1947. *Capitalism, Socialism and Democracy*. New York: Harper.

Shevtsova L., 2010. What's the Matter with Russia? *Journal of Democracy*, no.21 (1).

Shevtsova L., 2001. Russia's Hybrid Regime. *Journal of Democracy*, no. 12 (4).

Shulman S., 2005. National Identity and Public Support for Political and Economic Reform in Ukraine. *Slavic Review*, vol.64, no.1.

Shulman S., 2005. Ukrainian Nation-Building under Kuchma. *Problems of Post-Communism*, vol.52, no.5.

Silitski V., 2005. Preempting Democracy: The Case of Belarus. *Journal of Democracy*, vol.16, no.4.

Urban M., Igrunov V., Mitrokhin S., 1997. *The Rebirth of Politics in Russia*. Cambridge, UK: Cambridge Univ. Press.

Way L., 2005. Authoritarian State-Building and the Sources of Political Liberalization in the Western Former Soviet Union, 1992-2004. *World Politics*, vol. 57, no. 2.

Way L., 2005. Kuchma's Failed Authoritarianism. *Journal of Democracy*, vol.16, no.2.

Way L., 2005. Rapacious individualism and competitive authoritarianism in Ukraine, 1992-2004. *Communist and Post-Communist Studies*, vol.38, no.2.

Way L., 2004. The Sources and Dynamics of Competitive Authoritarianism in Ukraine. *Journal of Communist Studies and Transition Politics*, vol.20, no.1.

Wheatley J., Zurcher C., 2008. On the Origin and Consolidation of Hybrid Regimes: The State of Democracy in the Caucasus. *Taiwan Journal of Democracy*, 4 (1).

Whit M., 2005. Trouble in Tbilisi. *National Interest*, 79.

Whitehead L., 1989. The Consolidation of Fragile Democracies: A Discussion with Illustrations. In: R. Pastor, ed. 1980. *Democracy in Americas*. New York: Holmes and Maier.

Whitmore S., 2005, State and Institution Building under Kuchma. *Problems of Post-Communism*, vol.52, no.5.

Wigell M., 2008. Mapping 'Hybrid Regimes': Regime Types and Concepts in Comparative Politics. *Democratization*, 15 (2).

Wilson A., 2005. *Virtual Politics. Faking Democracy in the Post-Soviet World*. New Haven, CT: Yale University Press.

Wolczuk K., 2002. *The Moulding of Ukraine: The Constitutional Politics of State Formation* Budapest: Central European University Press.

Zon H., 2005. Political Culture and Neo-Patrimonialism under Leonid Kuchma. *Problems of Post-Communism*, vol.52, no.5.

***Derkachev, Pavel*¹: The Impact of Indicators Funding General Education on the Results of Unified State Exam in the Russian Regions²**

Abstract: *We would like to estimate contribution of regional expenses on education for results of Unified State Exam, controlling regional characteristics: rural population, human capital, Gini index, Student per Teacher ratio, Gross Regional Product (GRP) per capita.*

Introduction

There is a problem of inefficient allocation of budgetary funds for general education between different regions of the state. Meaning of the indicators characterizing the budget financing of general education in different by regions of the Russian Federation. For example, the minimum value of the region's budget expenditure on general education per student in 2012 amounted to 35 thousand rubles. In addition, the maximum value is 252 thousand rubles. Thus, the differences reach up to 7 times. Serious regional variation is also observed by the share of local budget expenditures in consolidated regional budgets for general education, the execution of expenditure on general education, the average monthly salary of teachers.

Meanwhile, schools are required to provide the same set of public services, performing federal state educational curriculum. Nowadays, the problem of income redistribution through regional mechanisms of intergovernmental relations not solved fully.

Aim of the Project

It is necessary to understand what part of the additional costs of regions is used to improve the quality of education (USE points increase) and what is spent inefficiently.

The study addresses the following questions:

1. Issues of fiscal federalism. What is the amount of contributions to the regional budget set for taxes? Pre revealed that additional spending on education in secured areas have no effect. Consequently, it is necessary to redistribute more funds through the federal budget. Recommendations may be sent to the Ministry of Finance.

2. What factors at the regional level do affect the costs of general education? Pre revealed that this proportion of people with higher education, the Gini coefficient (a bundle of income), GDP per capita, student-teacher ratio, the proportion of the rural population. That is, we can offer a formula to determine adjustments volume of transfers from the federal budget to the regions. Already, in the allocation of 120 billion every rural student isolated 2 times more money than

¹ pderkachev@live.ru, Center for Applied Economic Research and Development, Graduate School of Education, National Research University Higher School of Economics, Moscow, Russia

² Participants of the research project are Martin Carnoy, Pavel Derkachev and Olga Beshkareva.

the urban student. But there is no the scientific basis for that. We can offer a scientifically based formula with several variables.

Hypotheses and Methodology

There are a lot of works with the estimation of production function of education. One of the first was Coleman Report (Coleman, 1966). Issues of regional differences in the financing of general education in Russia were made in the article of M. Agranovich (Agranovich, 2004). It substantiates the importance of comparing the results of the exam taking into account external factors that determine the quality of education. For elimination of external factors used method of grouping similar regions and then - a comparison of parameters within the group. The same method was advised to use S. Bochenkov and I. Waldman (Bochenkov and Waldman, 2013).

We decided to use the method of multiple regression to examine the relationship of USE and financing of general education. Why multiple regression is better than comparison groups?

1. For the definition of group are used expert surveys. In the case of multiple regression question about groups is removed, as we build a continuous function relating the exam scores and other characteristics of the regions.

2. It's possible to compare a limited number of groups among themselves. When using of 2-3 or more criteria for the comparative analysis of the task groups becomes impossible. In multiple regression number of variables can be easily increased to 8, if we carry out a cross-sectional analysis. In the case of panel data the number of variables under consideration can be increased.

3. When using groups are no clear criteria for intra- and inter-group comparisons. Multiple regression has the regression coefficients, which allow to compare factors in their influence on the USE.

We can say that the method of multiple regression - this is another step towards evidence-based research in education.

The research is based on the data of the Federal Treasury, accumulating data on the regional budget expenditures on education. Characteristics of the social and economic situation of the regions according to the State Statistics Committee, Ministry of Finance, the Ministry of Regional Development, the Ministry of Education and Science are used. Data on the mean scores of USE is obtained by the database of the Federal Test Center.

Results

Preliminary results are two models.

The Model No.1.

Descriptive Statistics^a

	Mean ^b	Root Mean Square	N
Zscore: USE math 2011	,0212660	1,00869755	79
Lg Budget expenses on primary and secondary education corrected by Index of Budget Expenses	4,8014	4,80264	79
Percent of rural population	30,52658	33,046856	79
Percent of population with higher education	,20582	,209526	79
Gini index	,39073	,391522	79
Student per Teacher ratio	12,46945	12,637322	79
Lg GRP per capita	5,3489	5,35389	79

a. Coefficients have been calculated through the origin.

b. The observed mean is printed

Model Summary^{c,d}

Model	R	R Square ^b	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,628 ^a	,394	,345	,81661978	,394	7,922	6	73	,000	1,653

a. Predictors: Lg GRP per capita, Percent of rural population, Percent of population with higher education, Student per Teacher ratio, Gini index, Lg Budget expenses on primary and secondary education corrected by Index of Budget Expenses

b. For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

c. Dependent Variable: Zscore: USE math 2011

d. Linear Regression through the Origin

ANOVA^{a,b}

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31,699	6	5,283	7,922	,000 ^c
	Residual	48,681	73	,667		
	Total	80,380 ^d	79			

a. Dependent Variable: Zscore: USE math 2011

b. Linear Regression through the Origin

c. Predictors: Lg GRP per capita, , % Percent of rural population, Percent of population with higher education, Student per Teacher ratio, Gini index, Lg Budget expenses on primary and secondary education corrected by Index of Budget Expenses

d. This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	Lg Budget expenses on primary and secondary education corrected by Index of Budget Expenses	1,590	,463	7,572	3,437	,001
	Percent of rural population	,021	,009	,681	2,369	,020
	Percent of population with higher education	7,574	2,921	1,573	2,593	,011
	Gini index	6,073	5,162	2,357	1,176	,243
	Student per Teacher ratio	-,045	,055	-,561	-,816	,417
	Lg GRP per capita	-2,173	,486	-11,532	-4,467	,000

a. Dependent Variable: Zscore: USE math 2011

b. Linear Regression through the Origin

Collinearity Diagnostics^{a,b}

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				Lg Budget expenses on primary and secondary education corrected by Index of Budget Expenses	Percent of rural population	Percent of population with higher education	Gini index	Student per Teacher ratio	Lg GRP per capita
1		5,802	1,000	,00	,00	,00	,00	,00	,00
2		,164	5,955	,00	,49	,01	,00	,01	,00
3		,021	16,482	,00	,01	,68	,00	,27	,00
4		,010	23,652	,02	,40	,22	,03	,71	,02
5		,002	58,821	,40	,02	,05	,73	,00	,01
6		,001	84,745	,57	,08	,04	,25	,01	,97

a. Dependent Variable: Zscore: USE math 2011

b. Linear Regression through the Origin

Residuals Statistics^{a,b}

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-1,8710021	1,5466660	,0224004	,63709270	79
Residual	-3,27272177	1,83844495	-,00113441	,79001178	79
Std. Predicted Value	-2,972	2,393	,000	1,000	79
Std. Residual	-4,008	2,251	-,001	,967	79

a. Dependent Variable: Zscore: USE math 2011

b. Linear Regression through the Origin

The Model No.2.

Descriptive Statistics^a

	Mean ^b	Root Mean Square	N
Zscore: USE rus 2011	,0573254	,91700285	79
Lg Budget expenses on primary and secondary education corrected by Index of Budget Expenses	4,8014	4,80264	79
Percent of rural population	30,52658	33,046856	79
Percent of population with higher education	,20582	,209526	79
Gini index	,39073	,391522	79
Student per Teacher ratio	12,46945	12,637322	79
Lg GRP per capita	5,3489	5,35389	79

a. Coefficients have been calculated through the origin.

b. The observed mean is printed

Model Summary^{c,d}

Model	R	R Square ^b	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,445 ^a	,198	,132	,85423194	,198	3,006	6	73	,011	2,033

a. Predictors: Lg GRP per capita, Percent of rural population, Percent of population with higher education, Student per Teacher ratio, Gini index, Lg Budget expenses on primary and secondary education corrected by Index of Budget Expenses

b. For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

c. Dependent Variable: Zscore: USE rus 2011

d. Linear Regression through the Origin

ANOVA^{a,b}

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13,162	6	2,194	3,006	,011 ^c
	Residual	53,269	73	,730		
	Total	66,431 ^d	79			

a. Dependent Variable: Zscore: USE rus 2011

b. Linear Regression through the Origin

c. Predictors: Lg GRP per capita, Percent of rural population, Percent of population with higher education, Student per Teacher ratio, Gini index, Lg Budget expenses on primary and secondary education corrected by Index of Budget Expenses

d. This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Lg Budget expenses on primary and secondary education corrected by Index of Budget Expenses	1,663	,484	8,711	3,436	,001
	Percent of rural population	-,015	,009	-,538	-1,627	,108
	Percent of population with higher education	4,144	3,055	,947	1,356	,179
	Gini index	-,326	5,400	-,139	-,060	,952
	Student per Teacher ratio	,006	,057	,083	,105	,917
	Lg GRP per capita	-1,546	,509	-9,028	-3,039	,003

a. Dependent Variable: Zscore: USE rus 2011

b. Linear Regression through the Origin

Collinearity Diagnostics^{a,b}

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				Lg Budget expenses on primary and secondary education corrected by Index of Budget Expenses	Percent of rural population	Percent of population with higher education	Gini index	Student per Teacher ratio	Lg GRP per capita
1	1	5,802	1,000	,00	,00	,00	,00	,00	,00
	2	,164	5,955	,00	,49	,01	,00	,01	,00
	3	,021	16,482	,00	,01	,68	,00	,27	,00
	4	,010	23,652	,02	,40	,22	,03	,71	,02
	5	,002	58,821	,40	,02	,05	,73	,00	,01
	6	,001	84,745	,57	,08	,04	,25	,01	,97

a. Dependent Variable: Zscore: USE rus 2011

b. Linear Regression through the Origin

Residuals Statistics^{a,b}

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-1,2748317	1,2390705	,0605255	,40623743	79
Residual	-1,65182614	1,89224923	-,00320012	,82639301	79
Std. Predicted Value	-3,287	2,901	,000	1,000	79
Std. Residual	-1,934	2,215	-,004	,967	79

a. Dependent Variable: Zscore: USE rus 2011

b. Linear Regression through the Origin

References

Agranovich, M. (2004). Opportunities analysis of educational systems based on the results of the exam. Questions of Education, 2.

Bochenkov, S. and Waldman, I. (2013). The interpretation and presentation of the results of the USE: problems and possible solutions. Questions of Education, 3.

Coleman, J. et al. (1966). Equality of Educational Opportunity, US Government Printing Office, Washington, D.C.

Dokuka, Sofia¹, Valeeva, Diliara², Yudkevich, Maria³: The Joint Influence of Online and Offline Social Networks on Academic Performance

Abstract: *There is no generally accepted view about the influence of online activity on student academic performance. This research aims to estimate the joint influence of offline and online networks on academic performance. We use the data from longitudinal offline survey about the friendship and advice ties within the HSE student community and 'Vkontakte' data about these students' friendship links.*

Introduction

Social ties constitute are a very important element in learning environment (Harasim 1995, Haythornthwaite 2002). They serve as an instrument for information and knowledge dissemination (Granovetter 1973), because the structural position within the social system indicates the person's ability to obtain important information.

Some researchers are trying to find out the link between social network indexes (or particular social structures) and student academic achievement. In (Baldwin 1997, Poldin 2013) scholars investigated students' network positions and GPA. It turned out that people with central positions tend to perform better. Calvó-Armengol also found the positive correlation between the number of friends and academic performance (Calvó-Armengol 2009). Haythornthwaite (Haythornthwaite 2002) outlined the positive correlation between central positions and mentioned that active actor within the network feel belongingness to the community. As was pointed out by Lin (Lin 2010), there is a correlation between person's performance and his/her friends' academic achievements, or so called peer effects.

For the last few years online social networks such as Facebook and Twitter became very important tools for the information sharing and contact supporting. Facebook allows people create profiles with real names and personal details and establish 'friendship ties' which serve for the information exchange. Students actively use Facebook for many purposes and such interactions are in focus of many researches (Lewis 2008, Mayer 2007, Lewis 2012).

Despite the interest in the student online networks, there are very few papers about the interaction of online community composition and online network indexes and academic performance. Vaquero (Vaquero 2013) investigated the dynamics of communication interactions within the online educational platform Moodle and discovered the social segregation between well-performed and poor-performed students. Author outlined that students with high grades create a dense cluster ('rich club') and actively communicate with similar performed peers, but avoid interactions with poor-performed classmates. At the same moment, Mayer (Mayer

¹ sdokuka@gmail.com, Center for Institutional Studies, National Research University Higher School of Economics, Moscow, Russia

² dvaleeva@hse.ru, Center for Institutional Studies, National Research University Higher School of Economics, Moscow, Russia

³ yudkevich@hse.ru, Center for Institutional Studies, National Research University Higher School of Economics, Moscow, Russia

2007) did not find the influence of online network to academic achievements. Kirschner (Kirschner 2010) noted that Facebook users have GPA lower than non-users. Junco (Junco 2012) founds that using Facebook for socializing was negatively related to GPA, while using social networking site for collecting and sharing information was positively correlated with academic performance.

Although there are some papers about influence of offline or online networks on academic achievements, there are no works about the influence of both networks on performance. However, in contemporary societies both offline and online interactions are important. We can even assume that contradictions in existing papers (Vaquero 2013, Kirschner 2010, Junco 2012) occurred because of studying only one network type and avoiding the influence of other social connections. So, the investigation of both online and offline social networks and their role in academic performance can reveal hidden regularities.

Aim of the Project

The goal of our project is to fill the void in empirical studies of joint influence of offline and online networks on academic achievement.

Data about offline friendship and study assistance interactions were collected by offline survey of HSE students. Students were asked about their friends and classmates they ask for advice, data about GPA and socio-demographic characteristics were also gathered. Information about online friendship ties and online attributes were gathered by crawling from the most popular Russian social networking site 'Vkontakte' (which is often called as 'Russian Facebook').

Intuition

Basing on existing literature we can assume that students with high academic performance tend to communicate with similar performing peers. As was pointed out by Vaquero (Vaquero 2013), students with high GPA create dense clusters within the online network and try to avoid interactions with poor-performing ones. It can also be analyzed as a case of social segregation within the network (homophily), when people tend to establish links with actors who have similar characteristics and avoid interaction with different ones (McPherson 2001).

However, social networking sites are a good tool for the collaboration. Online friendship network cannot be considered as a good predictor for academic achievements. The presence of 'friendship link' in 'Vkontakte' does not mean that these persons discuss educational issues or even communicate with each other at all. Likely the online friendship can be described as link for information exchange. In (Kirschner 2010, Junco 2012) was traced the negative relationships between Facebook usage and academic performance. Therefore, we assume that popularity within online friendship network does not link with academic performance. Probably for the investigation of the interaction between online communication and academic achievements other types of ties (communication frequency, likes, etc.) can be used.

Despite there is no researches about impact of both online and offline networks on academic performance, the existing works found correlation between as well as online and offline structures. So we can assume the presence of strong connection between the networks and achievements.

Hypotheses and Methodology

Based on previous studies and intuition we formulated the following hypotheses.

H1: Students with high academic performance tend to aggregate into the dense clusters within the online networks.

H2: Popularity within online friendship network does not positively correlate with academic achievements.

H3: The impact of both online and offline networks is strongly connected with academic achievement.

To study the structure of both types of networks social network analysis will be used (Knoke 2008). Exponential random graph models (Robins 2007) and stochastic actor-oriented models (Snijders 2010) will be applied.

References

Baldwin T. T., Bedell M. D., Johnson J. L. The social fabric of a team-based MBA program: Network effects on student satisfaction and performance //Academy of Management Journal. – 1997. – Vol. 40. – №. 6. – pp. 1369-1397.

Calvó-Armengol A., Patacchini E., Zenou Y. Peer effects and social networks in education //The Review of Economic Studies. – 2009. – Vol. 76. – №. 4. – pp. 1239-1267.

Granovetter M. The strength of weak ties //American journal of sociology. – 1973. – Vol. 78. – №. 6. – pp. 1.

Harasim L. M. (ed.). Learning networks: A field guide to teaching and learning online. – MIT press, 1995.

Haythornthwaite C. Building social networks via computer networks: Creating and sustaining distributed learning communities //Building virtual communities: Learning and change in cyberspace. – 2002. – pp. 159-190.

Junco R. Too much face and not enough books: The relationship between multiple indices of Facebook use and academic performance //Computers in Human Behavior. – 2012. – Vol. 28. – №. 1. – pp. 187-198.

Kirschner P. A., Karpinski A. C. Facebook® and academic performance //Computers in human behavior. – 2010. – Vol. 26. – №. 6. – pp. 1237-1245.

Knoke D., Yang S. Social network analysis. – Sage, 2008. – Vol. 154.

Lin X. Identifying peer effects in student academic achievement by spatial autoregressive models with group unobservables //Journal of Labor Economics. – 2010. – Vol. 28. – №. 4. – pp. 825-860.

Lewis K., Gonzalez M., Kaufman J. Social selection and peer influence in an online social network //Proceedings of the National Academy of Sciences. – 2012. – Vol. 109. – №. 1. – pp. 68-72.

Mayer A., Puller S. L. The old boy (and girl) network: Social network formation on university campuses //Journal of public economics. – 2008. – Vol. 92. – №. 1. – pp. 329-347.

McPherson M., Smith-Lovin L., Cook J. M. Birds of a feather: Homophily in social networks //Annual review of sociology. – 2001. – pp. 415-444.

Poldin O. V., Valeeva D., Yudkevich M. M.. How social ties affect peer-group effects: a case of university students / Working papers by NRU Higher School of Economics. Series SOC "Sociology". 2013. No. 15/SOC/2013.

Robins G. et al. An introduction to exponential random graph (p^*) models for social networks //Social networks. – 2007. – Vol. 29. – №. 2. – pp. 173-191.

Snijders T. A. B., Van de Bunt G. G., Steglich C. E. G. Introduction to stochastic actor-based models for network dynamics //Social networks. – 2010. – Vol. 32. – №. 1. – pp. 44-60.

Vaquero L. M., Cebrian M. The rich club phenomenon in the classroom //Scientific reports. – 2013. – Vol. 3.

Edachev, Artem¹, Nathov, Timur², Polischuk, Leonid³: The Impact of War on Social Capital: the Case of World War II in the Soviet Union

***Abstract:** This project traces and gauges the impact of the World War II on social capital in Russia. A body of evidence that suggests that the World War II could have had a liberating impact on its Russian veterans by increasing their sense of autonomy, appreciation of freedom, rights for independent thinking and choice, level of trust and solidarity and the capacity for collective action, known as social capital. Using statistical analysis of survey of veteran's descendants, we partly confirm that hypothesis. This results could confirm the role of WWII as a significant formative factor of social capital in modern Russia and could be one of the steps to explain the observed variations of cultural norms and traits in the Russian society across regions, cities, social groups, demographic cohorts, which are shown to be closely associated with the uneven quality of subnational governance, welfare and life satisfaction in the country and are highly relevant for the prospects of political reform and modernization in Russia.*

Introduction

Culture which comprises norms, values, and attitudes, is a slow-moving institution (Roland 2004), shown to have a major impact on economic development and institutional change. Culture exhibits significant path dependency and could be affected by long-term political history as well as by shocks such as wars, crises, revolutions and other historic landmarks and turning points. Once such cultural changes have occurred, they become entrenched and passed along from one generation to another through various socialization and cultural transmission mechanisms, such as “vertical socialization” in families (Bisin, Verdier 2001). Examples include the impact of slave trade on trust in modern Africa (Nunn, Wantchekon 2011), the consequences to the Holocaust and pale for cultural attitudes in today’s Russia and Eastern Europe (Acemoglu, Hassan, Robinson, 2011; Grosfeld, Rodnyansky, Zhuravskaya 2011), influence of the Great Recession on norms and attitudes of contemporary Americans (Nunn 2008), etc.

Literature on the Soviet Union’s war and post-war history provides numerous evidence of a significant value shift of the Red Army’s men and officers in the above outlined directions (see e.g. Zubkova 1998 and the sources cited therein). These changes have also been clearly reflected in the Russian post-war prose and poetry (Grossman, Nekrasov, Slutski, Shalamov et al.) which emphasize the liberating impact of the war and the sense of self-confidence that it had instilled, despite highly centralized army-at-war environment, enhanced by the Soviet authoritarian regime and police state. This change of values has produced strong expectations of regime

¹ edachev@gmail.com, Laboratory for Applied Analysis of Institutions and Social Capital, National Research University Higher School of Economics, Moscow, Russia

² Laboratory for Applied Analysis of Institutions and Social Capital, National Research University Higher School of Economics, Moscow, Russia

³ Laboratory for Applied Analysis of Institutions and Social Capital, National Research University Higher School of Economics, Moscow, Russia

liberalization after the war, which was quelled by a new wave of political repressions launched by Stalin in the late 1940-s and continued until his death in 1953.

Russia's victory over Napoleon and the subsequent European expedition of the Russian army prompted the Decembrists' uprising in 1825, and most of the conspirators were officers inspired by their war experience. Jha and Wilkinson (2012) report the evidence that Indian soldiers who took part in WWII in the British Army were exceptionally prominent and active in subsequent independence movement and in protecting their communities from the sectarian violence that ensued. Recent evidence from Africa suggests that war experience contributes to political activism (Blattman 2009). Participation in the Vietnam War affected political attitudes and social norms of the US Vietnam veterans (Ericson, Stocker, 2011). More generally, war experience leads to "posttraumatic growth" including stronger and more meaningful interpersonal relationships, changed priorities, and increased perception of personal strength (Tedeschi, Calhoun, 2004).

Aim of the Project

This project traces and gauges the impact of the Second World War on social capital in Russia. More specifically, we investigate the implications of first-hand participation in combat on trust, perception of rights and freedoms, and capacity for self-organization and collective action. It is often assumed that an army, especially army at war, is the utmost form of vertical hierarchy and as such suppresses individual autonomy and freedom and instead cultivates subordination and obedience. Yet there is a body of evidence (described above) that suggests the opposite – the Second World War could have had a liberating impact on its Russian veterans by increasing their sense of autonomy, appreciation of freedom, and rights for independent thinking and choice. There are even stronger indications that war experience has increased trust and solidarity and hence the capacity for collective action, known as social capital.

Confirmation of the role of WWII as a significant formative factor of social capital in modern Russia would be important in explaining the observed variations of cultural norms and traits in the Russian society across regions, cities, social groups, demographic cohorts etc. Such variations are shown to be closely associated with the uneven quality of subnational governance, welfare and life satisfaction in the country (Menyashev, Polishchuk, 2012) and are highly relevant for the prospects of political reform and modernization in Russia.

Hypotheses and Methodology

Our hypothesis is that WWII veterans differ from people who didn't experience combat actions in the level of trust, self-reliance, collective actions, attitude to authority, power distance. Our empirical strategy is based on survey data. The number of surviving WWII veterans is very small, and hence we rely on cultural transmissions of values and attitudes from parents to children and, in the next socialization cycle, to grandchildren. Accordingly, we relate cultural traits revealed by surveys to family history of respondents (if such history is a part of the survey), or simply to their age, on the ground that age could be correlated with the probability of having a war participant among the respondent's ancestors. . The

second approach clearly involves significant “noise” but allows using vast data of earlier conducted surveys, such as Russia’s waves of the World Values Survey, and data of the GeoRating project. Those will be augmented by the data of a specific survey with a smaller sample where war family history will be explicitly recorded. Using contemporary values and attitudes to reconstruct trust and social traits of earlier generations for which no direct survey data are available has become a popular tool of empirical research (see e.g. Algan, Cahuc 2010). In addition, our empirical strategy makes use of the fact that there were constraints on the drafting age during WWII, which is a source of exogenous variations leading to higher quality empirical findings.

Results

Statistical analysis of the survey data with family history (logit regressions with control variables such as age, sex, income, education) shows some significant results: descendants of veterans had a higher (up to 2 times) probability to answer about feel of responsibility for their home and yard as compared with the rest of the sample, higher (up to 1,4 times) probability to point “Honesty” as an important trait for their child, higher (up to 1,5 times) probability to point «Be helpful to the loved ones” and “Make a society better” as their life goals and lower (on 27%) probability to point “Pleasure” as their life goals. This results show that our hypothesis are partly confirmed. Using survey data without questions about family war history hasn’t led us to significant indicators, probably because of the data “noise”.

References

- Acemoglu, D., T. Hassan, J. Robinson. Social Structure and Development - A Legacy of the Holocaust in Russia. *Quarterly Journal of Economics*, 126, 2011.
- Algan, Y., and P. Cahuc Inherited Trust and Growth. *American Economic Review*, 100, 2010.
- Bisin, A., and Th. Verdier. The Economics of Cultural Transmission and the Dynamics of Preferences. *Journal of Economic Theory* 97, 2001.
- Blattman, Ch. From Violence to Voting: War and Political Participation in Uganda. *American Political Science Review*, 103, 2009.
- Grosfeld, I., A. Rodnyansky, and E. Zhuravskaya. Persistent Anti-Market Culture: A Legacy of the Pale of Settlement and of the Holocaust. Mimeo. 2011.
- Jha S., Wilkinson S. Does Combat Experience Foster Organization Skill? Evidence from Ethnic Cleansing During the Partition of South Asia. *American Political Science Review*, 106, 2012.
- Menyashev, R., L. Polishchuk Bridging or Bonding: Economic Payoff to Social Capital, with an Application to Russia. Mimeo, 2012
- Nunn, N. The Importance of History for Economic Development. Mimeo, 2008.
- Nunn, N., and L. Wantchekon. The Slave Trade and the Origins of Mistrust in Africa. *American Economic Review*, 101, 2011.
- Tedeschi, R., and L. Calhoun. Posttraumatic Growth: Conceptual Foundations and Empirical Evidence. *Psychological Inquiry*, 15, 2004.

Zubkova, E. *Russia After the War: Hopes, Illusions, and Disappointments, 1945-1957*. Armonk, NY: M.E. Sharpe, 1998.

Fedorovykh, Danil¹: Effects of Legalizing Bribe Giving

Abstract: *The idea of ligation of bribe giving for certain types of bribes was expressed by K. Basu in 2011 and got a name 'Basu proposal'. In this paper we discuss effects that can be caused by the direct implementation of this proposal. Our game-theoretic model shows that while legalisation of certain bribe-giving occurrences can lead to some positive consequences, it is not always a good idea to return bribe to the bribe-giver as suggested by Basu. The chance to get the paid bribe back might increase the amount of bribes that end up in corrupt officials' pockets.*

Introduction

The idea of ligation of bribe giving for certain types of bribes was expressed by Kaushik Basu in 2011 and got a name 'Basu proposal'. Before that, some authors discussed the possibility of asymmetric penalties for bribe-giver and bribe taker (for example, see Lambsdorff and Nell, 2007) and showed controversial results. Basu's paper started a discussion whether or not some types of bribe can be legalized, and also whether or not it is OK to give money back to the payer in order to incentivize him to report cases of corruption, and so to disincentivize bribe-taking.

Some critics, including Dreze (2011), expressed their concerns about the moral issues of such legalization and also the problem of imperfect law enforcement (if a judge in a court is also corrupt, he will not consider the bribe-giver's report properly). Dufwenberg and Spagnolo (2012) created game-theoretic models taking into account Dreze's arguments. Abbink et al. (2013) conducted several laboratory experiments. In this project we further theoretically investigate what effects might be caused by the direct application of Basu proposal.

Aim of the Project

The aim is to state the conditions under which the legalization of bribe-giving and returning the bribe back might cause certain consequences: increase or decrease the size of bribe, total amount of bribes, number of corruption cases, number of corrupt officials prosecuted.

Hypotheses and Methodology

We use game-theoretic approach to construct different models of interactions between citizens and government officials. In the basic version of the paper we use simple model of such interaction where a citizen wants to get some service from the government that is supposed to be done free of charge.

Stage 1. The Official can either provide this service free as he supposed to do or require some illegal payment (bribe).

Stage 2. If the bribe is required, the Citizen can either give it or refuse, and also can either report the case or stay silent.

Stage 3. If the bribe was actually paid, then an Inspector can either reveal it or not, the probability of this depends on whether or not the case was reported at Stage 2. In case the bribe was revealed, the parties pay fines. Basu proposal states

¹ dfed@hse.ru, National Research University Higher School of Economics, Moscow, Russia

that the fine for the bribe-giver should be negative, so he gets his bribe back, while the fine for the Official should be positive and large.

Results

We find that under some circumstances the direct application of Basu proposal (or some sort of it) might lead to unexpected, inferior results. Interestingly enough, in contrast to most previous critics, we do not employ any moral cost arguments, relying only on economic consequences caused by change in incentives. In particular, we show that an improvement in the quality of law enforcement under Basu proposal leads to two effects: i) the official pays the fine with higher probability, and ii) the citizen can pay greater bribe because he knows that he can get it back with higher probability. If a substantial share of the bribe is returned, the latter effect can outweigh the former and an improvement in law enforcement can surprisingly be good for corrupt officials.

It is still the question whether this result is robust, i. e. whether it will be present in different setups, including introduction of risk non-neutrality, moral cost, changing the structure of the game, changing market structure (what if there are several competent officials), endogenizing inspector's actions. All these are questions for further research.

References

Abbink K., Dasgupta U., Gangadharan L. and Jain T. Letting the Briber Go Free: an Experiment on Mitigating Harassment Bribes //Monash University, Discussion Paper No. 62/13. 2013

Basu, Kaushik (2011). "Why, for a Class of Bribes, the Act of Giving a Bribe should be Treated as Legal". B: India Ministry of Finance Report.

Drèze J. The bribing game. 23/04/2011. URL: <http://archive.indianexpress.com/news/the-bribing-game/780094/>

Dufwenberg M. and Spagnolo G. Legalizing Bribe Giving. 2012. //CEPR Discussion Paper No. DP9236.

Lambsdorff J. and Nell M. Fighting Corruption with Asymmetric Penalties and Leniency. //CeGE Discussion Paper, No. 59. 2007

Hwang, Jeeyoung¹: Agency Problems in Russian Banking System

Abstract: *Recently the Central Bank of Russia (CBR) has revoked many licenses of commercial banks even for the short time. In my opinion, the opportunistic behavior of bank managers and owners and weakness of regulation and supervision of banking system is viewed as major factors, contributing to the recent revocation of banks' license. In particular, the asymmetry of information existing among economic agents in the banking sector causes the agency problems. It requires the monitoring and supervision of banks. However, when a principal delegates the monitoring and supervision, there is probability of corruption. In Russia, especially, corruption is regarded as one of the greatest barriers to enforcement of regulations. Therefore, this research aims at exploring the problem of principal-agent in the Russian banking sector, focusing on the possibility of corruption between banks and inspector (agency). Therefore, the paper will recommend the effective policy initiatives to alleviate the agency problems.*

Introduction

Recently the Russian banking market is going through bad patch. Since the beginning of this year, the Central Bank of Russia (CBR) has already revoked twenty cases of licenses. Actually, this revocation of banks' licenses is not the first event on Russian banking system. In the past, however, it was often only for local banks with relatively small assets, not for big banks with wider client networks. Therefore, such small banks held relatively small shares of the market as a whole and the revocation of their licenses did not affect greatly on the overall banking market. Still, the recent revocation of banks' licenses is not only small banks but big ones. For example, the license of the Master-Bank, which is the 72-nd place in Russia in terms of the capital size and the 41st largest bank by deposits, was withdrawn by the CBR on November of last year. The closure of such a big bank sent shock waves through Russia's banking market.

As stated by CBR, the recent recalls of banking licenses may improve unhealthy banking system in Russia. However, as far as this policy is implemented without considering fundamental reasons of banking insolvency and its solutions, continuous massive recalls of banking licenses may give disappointing results, such as increasing distrust of clients in private banking sector and biased movement of clients from small private banks to major banks with state ownership. After all, its effect may not be bigger than expected and may undermine the fundamental financial system instead of strengthening the market.

With regard to this issue, the CBR has announced that many banks turned to be unreliable in terms of compliance with legislation. They failed to comply with the requirements to counteract money laundering and terrorism financing. Also, the management and owners of the banks failed to take the necessary measures aimed at normalizing its activity. Taken together, the opportunistic behavior of bank managers and owners and weakness of regulation and supervision of banking system is viewed as major factors, contributing to the recent revocation of banks' licenses.

¹ hjydream@gmail.com, Moscow State University, Moscow, Russia

Literature

This research is relevant with two topics. The one is the credence goods market, the other is agency problems in the banking sector. Banking services also fall broadly into the category of credence goods, established by Darby and Karni(1973). In the market of credence goods, it is difficult for a client to check the quality of product or service ex ante and even ex post, and to know whether those products and services are really needed for them. In the banking market, which is a credence goods market, experts/sellers have better information about the goods or services than their clients and this information is called as asymmetric information. These asymmetries of information are shown between owners and managements, between clients and banks, or among clients, banks and regulatory agencies. In these circumstances, experts/sellers have an incentive to exploit the information asymmetry by defrauding their clients or sometimes by capturing regulators and/or paying bribes to inspectors at the expense of clients.

Also, asymmetric information is considered as the cause of many agency problems, which undermine the consolidation of banking system. The agency problem is very closely related with moral hazard. R.S.Demsetz et al.(1997) argue that the moral hazard problem and the bank owner/manager agency problem in banking should be examined jointly because those problems may happen simultaneously between risk-aversion of managers and owners' risk preferences associated with moral hazard. Therefore, with the purpose of its stabilization, banking sector is generally required for the external control through bank-specific regulation and monitoring by regulatory agencies, market discipline and internal control such as incentive structures, improved corporate governance. However, it is not underestimated that there is a possibility to communicate and collude between agents and/or between agent and inspector. Jean-Jacques Laffont et al.(1997) analyze a mechanism design problem in which the agents can collude under asymmetric information. T.Friehe(2008) studies correlated payoffs in the inspection game as formulated by Tsebelis(1989). Mookherjee and Png(1995) studies the optimal compensation policy for a corruptible inspector and finds that bribery is an inefficient way of encouraging the inspector to monitor.

Aim of the Project

In general, there would be several factors to arouse a banking system disturbance. In particular, informational asymmetries are more important in the banking market due to its own specific characteristics. The asymmetry of information existing among economic agents in the banking sector causes the agency problems. It requires the monitoring and supervision of banks. However, when a principal delegates the monitoring and supervision, there is probability of corruption.¹ In Russia, especially, corruption is regarded as one of the greatest barriers to enforcement of regulations. Therefore, this research aims at exploring the problem of principal-agent in the Russian banking sector, focusing on the possibility of corruption between banks and inspector (agency). Therefore, the

¹ Mookherjee and Png(1995).

paper will recommend the effective policy initiatives to alleviate the agency problems.

Hypotheses and Methodology

A game theoretic approach is used in this paper. This analysis is based on the framework, proposed by Mookherjee and Png(1995) and Tim Friehe(2008). This game is between bank and an inspector. There are two players both of which are risk-neutral.

Results

Unfortunately, I have just organized hypothesis and methodology in the present paper but I'll do my best to develop this paper and have preliminary results to show at the summer school. I'm very interested in receiving comments on this study from school participants.

References

Chang, C.C., Mjelde, J.W., and Ozuna T. (1998). Political pressure and regulatory control. *Public Choice*, 97, 687-700

Darbi and Karni (1973). Free competition and the optimal amount of fraud. *Journal of Law and Economics*, 16(1):67-88.

Demsetz, Rebecca S., Marc R.Saidenberg, and Philip E.Strahan (1997) Agency problems and risk taking at banks. Federal Reserve Bank of New York Research Paper No.9709

Jean-Jacques Laffont and David Martimort.(1997). Collusion Under Asymmetric Information. *Econometrica*, Vol.65, No.4 (Jul., 1997), pp.875-911

Mookherjee D., and Png, I.P.L. (1995). Corruptible law enforcers: How should they be compensated? *Economic Journal*, 105, 145-159.

Tsebelis, G. (1989). The abuse of probability in political analysis: the Robinson Crusoe fallacy. *American Political Science Review* 83:77-92

Tim Friehe. (2009). Correlated Payoffs in the Inspection Game: Some Theory and an Application to Corruption. *Public Choice*, Vol.137, No.1/2 (Oct., 2008), pp.127-143

Ivanov, Denis¹, Borisova, Ekaterina², Govorun, Andrey³, Levina, Irina⁴: What is the Relationship between Trust and Preferences for Redistribution in Russia?

Abstract: *The project aims at studying how trust affects preferences for redistribution in Russian cities and regions. On a cross-section data of 30000 individuals collected for 2007-2011 we show that trust matters statistically and economically among traditionally examined factors such as fairness, culture, historic experience, etc. Higher trust leads to less support for redistribution in favor of people in complex life situations who are still able to work. Instead more support is found for government aid to those who are unable work because of health problems or age, or those who have performed distinguished service on behalf of the society. Results are robust and find support in the literature. To find relevant instruments for trust we examine its determinants, such as experience of local self-government, mass political-motivated persecutions in the past, climate variations, etc.*

Introduction

Interpersonal trust is a key component of social capital which determines the society's capacity for collective action. A huge body of empirical and theoretical research showed its importance for economic and institutional development of nations: their economic outcomes, quality of governance and political accountability, teaching practices and educational achievements, physical and mental health, happiness (see Algan, Cahuc, 2013 for the overview of the studies). In spite of these several problems could be noticed. First, many results are based upon datasets provided by World Values Survey (WVS), European Values Study (EVS) or General Social Survey (GSS) and thereby reflect relationships for a whole world or for a limited set of countries. There is a dearth of such research for transition and developing countries. It's especially true for Russia which encounters only few studies on social capital and trust (Marsh, 2000, Rose, 2000, Kennedy et al., 1998). Second, a lot of areas and specific mechanisms of potential trust influence remain unexplored. For example, it's a common knowledge that trust affects economic outcomes (Knack, Keefer, 1997, Algan, Cahuc, 2010), but what are the precise channels of influence? These can be entrepreneurial activity, preferences for different types of economic activities, demand for redistributive policy, etc. Careful examination of these topics is needed.

Aim of the Project

The project aims at studying how trust affects preferences for redistribution in Russian cities and regions. It's already documented that such preferences are driven by a large set of different parameters such as fairness and altruism (Alesina,

¹ d.s.ivanov@inbox.ru, National Research University Higher School of Economics, Moscow, Russia

² National Research University Higher School of Economics, Moscow, Russia

³ National Research University Higher School of Economics, Moscow, Russia

⁴ National Research University Higher School of Economics, Moscow, Russia

Angeletos, 2005, Luttens, Valfort, 2008; Fong et al., 2006), cultural values (Luttmer, Singhal, 2011), public values (Corneo, Gruner, 2002), historic experience (Alesina, Giuliano, 2011), political views (Alesina, Giuliano, 2011). The relationship between trust and preferences for redistribution is found in (Algan et al., 2012). But again these all are results for specific sets of countries. Moreover regional variations of preferences could be quite different both in the set of factors and direction of their influence. Non-monotonic relationship is shown in (Algan et al., 2012). Could it be more concrete with more precise questions about redistributive policies including defined areas and people to support?

Hypotheses and Methodology

In our view, relationship between trust and preferences for redistribution may be tricky because there are opposite acting forces. Low-trusting individuals may perceive social security networks as their personal insurance against unfaithful, opportunistic behavior of others – issue about which they are highly concerned (in a more broad context, low-trust societies require more rigorous government regulation of economy, as shown in (Aghion et al. 2010)). On the other side, low-trusting individuals may also be concerned about moral hazard problems potentially associated with social programs. While the highest-trust societies like Scandinavian ones also have the most generous welfare states, it is much harder to make predictions about sign of relationship among low to middle trust societies like various regions of Russia.

We use data of about 30000 individuals collected for the period 2007-2011 obtained from Georating survey. We lack data on a tax and inequality level desired by the respondents; however, it is still possible to find out their views on which categories of people in need deserve government aid on a first priority.

In our empirical strategy individual level preferences for redistribution in 2011 serve as dependent variable. The main question examined is the following: “To whom, in your opinion, government should help first: poor, homeless, labor and war veterans, combat operations participants, distinguished teachers and doctors, families with children, one-parent families and families with many children, disabled, pensioners, unemployed?” Three options are allowed to choose. We construct an index on a scale from -3 to +3 where positive points are given for the preferences in favor of distinguished people, elderly or disabled and negative points for poor, homeless and others in difficult situations. Trust in 2007 aggregated for regions and cities is the main independent variable of interest. It goes in the traditional form: “Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?” with 1 for “Most people can be trusted” and 0 for “Can’t be too careful”. Trust is used in a crude form or calculated as residuals of the regression of trust on individual characteristics (age, gender, education, wealth, etc.). The last variant makes sense because we can’t control for individual determinants of trust in the main regression. Controls for the main regression include age, gender, wealth, education, political preferences and religion of the respondents as well as indicators of formal institutions quality and economic development of cities and regions.

Results

We show that trust matters both statistically and economically. It plays role among traditionally examined factors of preferences for redistribution such as fairness, culture, historic experience, etc. Moreover we find that higher levels of trust lead to more support for distribution in favor of those who performed services on behalf of the society (e.g. war veterans, distinguished teachers, physicians, etc.), as well as elderly and disabled who are unable to live on their own due to physical conditions. Lesser support is found for distribution to people in complex life situations who are still able to work (e.g. poor, homeless, single-parent households and multi-child families). It could be the case that trust is positively correlated with the belief that people have primary responsibility for their own fate. Thus social support should be provided only for distinguished persons or those who have become a prey to some exogenous risk (e.g., disease or accident). An alternative explanation lies in the sphere of the interplay between social capital and the state. High level of social capital could lead to substitution of the state functions. The data in the form of another measure of preferences provides support for the first hypotheses. Results are robust to different specifications.

To overcome endogeneity problem we propose to use instruments for trust. To find relevant ones we examine its historic and geographic determinants that could be relevant for such issues (see for e.g. (Durante, 2010) on the role of geography and (Nunn, Watchekon, 2011) for the historical roots of nowadays trust). Size and diversity of Russia and its turbulent history make it a convenient case for such investigations. Historic experience of local self-government, mass political-motivated persecutions in the past, severity of transitional economic downturn, climate variations are just several examples of the factors that are studied.

Overall project could yield direct policy-related lessons and recommendations.

References

- Aghion, P., Algan, Y., Cahuc, P., & Shleifer, A. (2010). Regulation and distrust. *The Quarterly Journal of Economics*, 125(3), 1015-1049.
- Alesina A., Angeletos G.-M. (2005) Fairness and Redistribution. *American Economic Review*, 95(4), 960-980.
- Alesina A., Giuliano P. (2011) Preferences for Redistribution. In: *Handbook of Social Economics*, edited by Alberto Bisin, Jess Benhabib, and Matthew O. Jackson, North-Holland, Volume 1, 93-131.
- Algan Y., Cahuc P. (2013) Trust, Growth and Well-being: New Evidence and Policy Implications. In: *Handbook of Economic Growth*, edited by Philippe Aghion and Steven Durlauf, 49-120.
- Algan Y., Cahuc P. (2010) Inherited Trust and Growth. *American Economic Review*, 100(5), 2060-2092.
- Algan Y., Cahuc P., Sangnier M. (2012) Efficient and Inefficient Welfare States, Institute for the Study of Labor, DP 5445.
- Corneo G., Gruner P.H. (2002) Individual Preferences for Political Redistribution. *Journal of Public Economics*, 83, 83-107.
- Durante R. (2010) Risk Cooperation and the Economic Origin of Social Trust: An Empirical Investigation, Working Paper, Economic Department, Sciences-Po.

Fong Ch.M., Bowles S., Gintis H. (2006) Strong Reciprocity and the Welfare State, In: Handbook on the Economics of Giving, Reciprocity and Altruism, edited by S. Kolm, and Jean Mercier Ythier, Elsevier, Volume 1, Chapter 23, 1439–1464.

Kennedy B.P., Kawachi I., Brainerd E. (1998) The Role of Social Capital in the Russian Mortality Crisis. *World Development*, 26(11), 2029-2043.

Knack S., Keefer Ph. (1997) Does Social Capital Have an Economic Payoff? A Cross-Country Investigation. *Quarterly Journal of Economics*, 112(4), 1251-1288.

Luttens R.I., Valfort M.A. (2008) Voting for Redistribution under Desert-sensitive Altruism. Working Papers of Faculty of Economics and Business Administration, Ghent University, Belgium, Ghent University, Faculty of Economics and Business Administration.

Luttmer, E.F.P., Singhal M. (2011) Culture, Context, and the Taste for Redistribution. *American Economic Journal: Economic Policy*, 3(1), 157–179.

Marsh Ch. (2000) Social Capital and Democracy in Russia. *Communist and Post-Communist Studies*, 33, 183–199.

Nunn N., Wantchekon L. (2011) The Slave Trade and the Origins of Mistrust in Africa. *American Economic Review*, 101(7), 3221–3252.

Rose R. (2000) Uses of Social Capital in Russia: Modern, Pre-modern, and Anti-modern. *Post-Soviet Affairs*, 16(1), 33-57.

Khmelev, Anton¹: How the Procurers Influence Competition in Public Tenders?

Abstract: *The efficiency of public procurement, i.e. the ability to procure goods of desired quality for a reasonable price, depends to a great extent on the number of bidders in the competitive bidding procedure. The more firms take part in the public procurement, the higher is the competition for the contract and, hence, the higher is the probability that the efficient firm will get the contract. But very often a procurer does influence the level of competition for a contract. In the paper, using data on public procurement of gasoline from Kamchatka Region, I show that public procurers prefer to interact with a sole supplier, thus, limiting competition in public procurements and provoking higher prices of public contracts.*

Introduction

The paper examines gasoline public procurements, because fuel is a highly standardized good, what helps to cut off individual quality differences between bidders. Efficiency of public procurements directly depends on the number of tender participants, which in its turn largely depends on how procurers organize their procedures. Procurers are in charge of determining the area of fuel delivery, the duration of contract, the type of procedure and some extra features of a contract (Yakovlev, 2012). It might be difficult for the gasoline market players to comply with all the features of a contract, for example, not all the entrepreneurs are able to operate in several geographic regions simultaneously (Eckert, 2013; Hosken et al., 2008; Pennerstorfer et al., 2013); the type of procedure may be troublesome to suppliers, who are technically unequipped to take part in electronic procedures; very few suppliers can afford advancing public organizations for long periods of time as well as delivering large amounts of fuel within several days. Additional requirements, like the usage of fuel cards, delivery of remaining fuel to the procurer's base, twenty-four-hour service and station ownership, may also discourage a number of suppliers to participate in a public tender. All these potential obstacles on the bidders' way to participate in public tenders leave a certain space for procurers to use them to limit the number of bidders when designing a competitive procedure (Klemperer, 2002).

The retail gasoline market of Kamchatka Region is especially interesting, because it does not contain many suppliers and has disproportional allocation of the gasoline market players (see Table 1). In fact, market narrowness and disproportional allocation make local procurers well informed about potential suppliers, which facilitates possible manipulative practices of procurers with the number of tender participants. Indeed, the competition in gasoline tenders of Kamchatka is quite low (see Table 2), and some procurers tend to operate with a sole supplier (see Table 3).

¹ khmelev@mail.ru, Center for Institutional Studies, National Research University Higher School of Economics, Moscow, Russia

Aim of the Project

The main aim of the paper is to reveal the reasons of low competition in public procurement of gasoline in Kamchatka Region.

Hypotheses and Methodology

Since the paper tries to describe possible ways the procurer influences tender competition, the following hypotheses have been formulated:

- 1) The lower the number of potential suppliers on the market, the lower the number of bidders;
- 2) The longer the duration, and the larger the volume of fuel and the number of gasoline types in a contract, the lower is the number of bidders.

The first hypothesis tests the influence of disproportional distribution of the gasoline market players across the region on tender competition, and the second hypothesis directly tests the potential of procurers to influence tender competition.

The method of study used in the paper is a case analysis in a combination with a correlation-regression analysis. I use a data set of 102 public contracts performed in 2013 in Kamchatka Region for OLS regressions, and the same data set for a correlation matrix.

The data base contains information on vast array of tender features, including volume (*volume*) and type (*type*) of gasoline, duration (*duration*) and number of administrative districts, where the fuel should be delivered (*district*), number of potential bidders (*n_pot*) as well as data on participation (p_1, p_2) and winnings of most active bidders (w_1, w_2).

To check the hypotheses, I used matrix correlations between the variables of the database together with OLS regressions.

Results

The results are presented in Tables 4-5. Correlation between the number of potential suppliers (*n_pot*) and the number of bidders (*n_bid*) turned out to be negative and significant (see Table 5). Such a result might point to the presence of unobserved factors, like unwillingness of the market players to participate in public tenders in districts with attractive private gasoline market, as well as existence of a player's social function of regular gasoline supply in poor and remote areas. Thus, the disproportional distribution of the gasoline market players across Kamchatka influences the regional tender competition.

If to consider the second hypothesis, the correlations of number of bidders with volume (*volume*), types of gasoline (*types*) and duration of contracts (*duration*) are negative and significant, what points to the fact that number of tender participants depends on choice of procurers. As far as the tender competition is concerned, there are only two firms that dominate in Kamchatka – the one that wins in 76% of public tenders, and the one with a winnings share of 14% (see Table 2). The player with the largest share of public contracts won most of them without competitors – the coefficient of the variable w_1 is negative (see Table 5). On the contrary, the second largest winner won his contracts in a competition – the coefficient of the variable w_2 is positive (see Table 5). Furthermore, the case analysis of Kamchatka Region does indicate the presence of signs of favoritism (Burget et al., 2004; Celentani et al., 2002; Laffont et al., 1993), when a definite procurer has a

'favorite' supplier, who is preferred to be involved in execution of the greatest part of the procurer's contracts (see Table 3).

All the above mentioned facts indicate that on a narrow and disproportionately distributed market procurers become well informed about potential suppliers, what gives them a certain power to manipulate the number of tender participants by posing rigid frameworks on duration of a contract as well as types and volume of gasoline. Further research is needed to check the results for robustness through testing whether the pattern of tender competition in Kamchatka is relevant to the other regions with a similar market structure.

Table 1. Distribution of gasoline suppliers across Kamchatka

Location	Petropavlovsk-Kamchatsky	Yelizovo	Vilychinsk	Milkovo	Sochokh	Ust-Bolsheretsk	Ust-Kamchatsk	Palana	Tilyichiki
Potential suppliers	22	21	16	15	14	12	12	11	9

Table 2. Basic statistics

Variable	Obs	Mean	Min	Max	Definition
n_bid	102	1,27	1	3	number of tender participants
auction	102	0,47	0	1	auction type of procedure
priceperlitre	102	41,36	30	60	ratio of contract price to the volume of gasoline
sprice	102	505043,00	34350	2790000	reserve (tender) price
volume	102	12295,32	750	64500	amount of procured gasoline
duration	102	88,46	3	404	length of a contract
types	102	1,75	1	3	number of sorts of gasoline
district	102	2,28	1	8	number of administrative districts, where gasoline should be delivered
n_pot	102	14,57	2	22	number of potential bidders
p1	102	0,84	0	1	frequency of tender participation of the bidder with the largest share of gasoline public contracts
p2	102	0,20	0	1	frequency of tender participation of the bidder with the second largest share of gasoline public contracts
w1	102	0,74	0	1	frequency of tender winning of the bidder with the largest share of gasoline public contracts
w2	102	0,16	0	1	frequency of tender winning of the bidder with the second largest share of gasoline public contracts

Table 3. Operations with a sole supplier

	Org. 1	Org. 2	Org. 3	Org. 4
Tender total	5	3	12	7
Tenders won by bidder 1	1	0	12	7
Tenders won by bidder 2	4	3	0	0

Table 4. Correlations (p<0.01; **p<0.05; *p<0.1)**

	<i>auction</i>	<i>duration</i>	<i>district</i>	<i>volume</i>	<i>types</i>	<i>n_bid</i>
auction	1					
duration	0,200978*	1				
district	-0,00544	0,025499	1			
volume	0,457534**	0,318565***	0,123319	1		
types	0,222848**	0,196836**	0,337368***	0,523613***	1	
n_bid	-0,5301**	-0,1603*	0,19802**	-0,22358**	-0,15953*	1
n_pot	0,099448	-0,02042	-0,617***	-0,04579	-0,357***	-0,0911

Table 5. OLS Regressions (p<0.01, ** p<0.05, * p<0.1)**

VARIABLES	(3) n_bid	(4) n_bid	(7) n_bid	(8) n_bid
auction	-0.418*** (0.0837)	-0.485*** (0.0826)	-0.420*** (0.0798)	-0.494*** (0.0802)
priceperlitre	-0.0232*** (0.00842)	-0.0158* (0.00851)	-0.0182** (0.00740)	-0.0110 (0.00773)
duration	-0.000415 (0.000451)	-0.000439 (0.000465)	-0.000415 (0.000433)	-0.000432 (0.000453)
n_pot	-0.0149** (0.00746)	-0.0133* (0.00766)		
p1				
p2				
w1	-0.348*** (0.0946)		-0.382*** (0.0913)	
w2		0.308*** (0.113)		0.307*** (0.109)
district			0.0579*** (0.0163)	0.0481*** (0.0168)
Constant	2.940*** (0.429)	2.340*** (0.415)	2.412*** (0.326)	1.841*** (0.334)
Observations	102	102	102	102
R-squared	0.397	0.362	0.445	0.394

References

Burget R., Che Y., (2004). Competitive Procurement with Corruption. *RAND Journal of Economics*, 35, 50-68.

Celentani M., Ganunza J., (2002). Competition and Corruption in Procurement. *European Economic Review*, 43, 1273-1303.

Eckert A., (2013). Empirical Studies of Gasoline Retailing: A Guide to the Literature. *Journal of Economic Surveys*, 27 (1), 140-166.

Hosken D.S., McMillan R., Talyer C.T., (2008). Retail Gasoline Pricing: What Do We Know? *International Journal of Industrial Organization*, 26, 1425-1436.

Klemperer P., (2002). What Really Matters in Auction Design. *Journal of Economic Perspectives*, Vol. 16, 169-189.

Laffont J., Tirole J., (1993). *Incentives in Regulation and Procurement*, Cambridge, UK: MIT Press.

Pennerstorfer D., Weiss C., (2013). Spatial Clustering and Market Power: Evidence from the Retail Gasoline Market. *Regional Science and Urban Economics*, 43, 661-675.

Yakovlev A.A., (2012). System of Public Procurements in Russia: On the Eve of the Third Reform. *Social Sciences and the Present*, №5, 54-70.

***Kholodilin, Konstantin*¹: Homeownership and Housing Market Regulations: a Case of Germany**

Abstract: *The project aims at estimating the effects of housing market regulations upon the homeownership rate. For this purpose in the first stage of the study a regulation index is developed that should measure the degree of regulation at the German housing market. Higher (lower) values of the index represent more (less) state intervention in the housing market. The index is comprised of individual indices each characterizing a separate housing policy tool (e.g., subsidies, taxes, rent controls, tenant protection, social housing, etc.). The composite regulation index is obtained as a weighted average of individual indices. In the second stage, the homeownership rate is regressed upon a set of explanatory variables, including the regulation index. The regression can also capture the possible nonlinear effects of the regulations, since too weak as well as too strong regulation can foster homeownership by making the rental housing unattractive with respect to the own housing both for landlords and for tenants.*

Introduction

The economic and social role of the housing market is difficult to overestimate. First, housing satisfies a need for shelter. Second, housing is the most important component of households' consumption expenditure and wealth. For example, in Germany, according to the data of the Federal Statistical Office, the housing expenditure —rental payments, housing repair, and heating— account for a one third of the total expenses of private households, whereas the housing wealth (6.3 trillions euros at the end of 2012) accounts for more than a half of wealth of private households (about 12.3 trillions euros), see SVR (2013). Therefore, the speculative price bubbles on real-estate markets are likely to trigger financial crises, which can, in turn, spill over to the real economy and produce deep recessions accompanied by huge employment reductions. Third, for more than a century the governments have been actively intervening in the functioning of the housing market. In many industrialized countries, the governments are applying a wide battery of policy tools —including tenant protection, rent controls, provision of social housing, various taxes and subsidies, etc.— to manipulate the housing markets. Given the importance of housing, such regulation is typically a subject of hot political debates in the society that often take form of massive protests. Hence, it is important to answer the question of whether and to which extent these policies allow attaining desired outcomes.

One of the crucial characteristics of the housing market is the homeownership rate (HOR)². This indicator plays an important role in political discussions. In some countries, e.g., in the USA, it “is often seen as an integral part of the American dream,

¹ kkholodilin@diw.de, DIW Berlin, Berlin, Germany

² There exist several definitions of the homeownership rate. The homeownership rate is often defined as the ratio of the households/persons living in their own homes to the total number of households/persons. Alternatively, the homeownership rate shows the ratio of the owner-occupied housing units to the total stock of occupied housing units or households. The cross-country differences in statistical methodology of measuring the HOR can complicate the international comparisons, see Proxenos (2002).

and encouraging homeownership has historically been an important feature of U.S. public policy", see Haughwout et al. (2010). In Germany, the coalition treaty concluded in 2009 between the CDU/CSU and FDP declared that one of the government purposes was to raise the HOR.

The homeownership rate varies largely even across the industrialized countries. For instance, in South European, CEE, and Anglo-Saxon countries, the vast majority of population is homeowners. By contrast, Germany and especially Switzerland are countries dominated by the tenants, which account for more than a half of population.

Whether or not the high HOR per se is a desirable goal, is subject to discussion. On the one hand, it is thought to contribute to the stability and order in the society¹, to encourage investment in local amenities and social capital (DiPasquale and Glaeser, 1999), and to complement the social security system. On the other hand, the homeownership is supposed to reduce labor mobility, since transaction costs of moving are higher for homeowner than for tenant.

The determinants and role of the HOR have been thoroughly examined in numerous publications. For an overview of the HOR studies at the international level see Gwin and Ong (2004) and Forrest (2004), among others. There are a couple of studies dealing with the HOR in Germany. Voigtländer (2006) concentrates upon the German case and investigates both the reasons for a relatively low HOR in Germany compared to other European countries and its socioeconomic importance. Lerbs and Oberst (2011) analyze the spatial variation of the homeownership rates across German planning regions.

A crucial determinant of the homeownership, which is often cited but seldom used in the empirical research is the institutional framework. The latter is a mixture of informal and formal institutions that are very difficult to measure. Here, we will concentrate on the formal institutions, that take form of published regulations, and will analyze their potential impact on the HOR in Germany.

Aim of the Project

The Aim of the Project is to quantify the housing market regulations in Germany and to construct an index characterizing a degree of state intervention in the housing market² that can be used to explain the HOR as well as other housing market variables. The index should be bounded between 0, which corresponds to the case of no regulation, and 1, which is the case of the total state control over housing market. The purpose of the index is to measure the strength of the housing market regulations at some time point, their evolution over time, and eventually to allow the international comparisons. Naturally, for such comparisons a construction of regulation indices for other countries based on the similar methodology would be required. Although it is beyond the scope of the project, it can be considered as a topic for the future research.

¹ There exist several definitions of the homeownership rate. The homeownership rate is often defined as the ratio of the households/persons living in their own homes to the total number of households/persons. Alternatively, the homeownership rate shows the ratio of the owner-occupied housing units to the total stock of occupied housing units or households. The cross-country differences in statistical methodology of measuring the HOR can complicate the international comparisons, see [Proxenos \(2002\)](#).

² The literature on measuring the regulations is new and growing, see [Dawson and Seater \(2013\)](#).

Hypotheses and Methodology

Hypotheses

In this study, several testable hypotheses will be examined.

The regulations do affect the HOR. This hypothesis can be tested by running a time-series regression including some control variables suggested by the theory together with the regulation index.

The effect of the regulations is nonlinear: Too weak or too strong housing market regulations produce higher HOR (Spain and France). An intermediate regulation level that leads to a lower HOR (Germany and Switzerland). For this purpose, one can either extend the above mentioned time-series regression to include square of the regulation index or estimate a nonlinear model.

Given a large variety of policy tools, it would be useful to identify those regulations that exert a stronger impact on the HOR and those that have virtually no impact.

Methodology

Firstly, a regulation index should be constructed. It should reflect various housing policy tools. The battery of the tools is very rich. It is briefly described below.

Direct promotion

Object promotion: Construction/modernization; low interest loans, provision of land at lower prices, and credit guarantees to the developers building social housing; provision of subsidies to the owners of social housing in order to make them keep lower rents; purchasing of occupancy rights from the owners of housing; fostering of the building savings schemes.

Subject promotion: Housing allowances for low-income tenant and homeowner households.

Indirect promotion

Housing market regulation through taxes and tax allowances: e.g., income tax, stamp duty tax, estate duty, inheritance tax, property tax.

Shaping the framework conditions: e.g., tenant eviction regulations, rent controls, interdiction of the housing misuse, restrictions on the improvement of housing quality, control over allocation of housing.

The idea behind the regulation index is to examine over a long period of time all the federal laws affecting the listed above regulations. This can be done using the following algorithm:

Some initial date should be chosen that will be treated as a reference, with respect to which the regulation changes are to be measured.

For each law issued starting in the reference period, a set of relevant regulations (see the list above) that it is covering has to be identified.

The researcher should figure out, whether a new regulation is introduced or an existing regulation is modified or removed.

A direction of regulations change should be determined:

if a new regulation results in strengthening (weakening) of the housing market regulations, then it should be assigned a positive (negative) point.

if modification/removal of an existing regulation results in strengthening (weakening) of the housing market regulations, then it should be assigned a positive (negative) point.

in case of changing the taxation rates, the rates themselves should be used as a measure of regulations.

For each regulation tool, the points should be added over time to obtain an individual index.

Based on the individual indices, a composite regulation index should be constructed as a weighted average.

Secondly, a regression analysis using HOR as dependent variable as well as several control variables and individual regulation indices or composite regulation index as regressors should be conducted. To test nonlinear effects of housing policy tools nonlinear transformation of the regulation indices can be used.

Results

For the moment, we are examining the housing market regulations in Germany over the last four decades. For this purpose, we extracted the German federal laws that appear to be relevant for the housing market. These laws are analyzed to detect whether they lead to more or less state involvement. The result of this analysis should be a set of individual regulation indices.

References

Dawson, J. W. and J. J. Seater (2013). Federal regulation and aggregate economic growth. *Journal of Economic Growth* 18, 137-177.

DiPasquale, D. and E. L. Glaeser (1999). Incentives and social capital: Are homeowners better citizens? *Journal of Urban Economics* 45 (2), 354-384.

Forrest, R. (2004). Economic downturns and the prospects for home ownership. University of Bristol.

Gwin, C. R. and S.-E. Ong (2004). Do we really understand homeownership rates? An international study. Baylor University Working Paper Series 2004-053-ECO.

Haughwout, A., R. Peach, and J. Tracy (2010). The homeownership gap. *Current Issues in Economics and Finance* 16 (5), 1-11. Federal Reserve Bank of New York.

Lerbs, O. and C. Oberst (2011). Explaining spatial variation in homeownership rates: Results for German regions. CESifo Working Paper Series 3377, CESifo Group Munich.

Proxenos, S. (2002). Homeownership rates: A global perspective. *Housing Finance International*, 3-7.

SVR (2013). Gegen eine rückwärtsgewandte Wirtschaftspolitik. Jahresgutachten 2013/14. Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung.

Voigtländer, M. (2006). Mietwohnungsmarkt und Wohneigentum: Zwei Seiten einer Medaille. Institut der deutschen Wirtschaft Köln.

Malkova, Alina¹: Processes of Diffusion of New Knowledge

Abstract: *In the given research the diffusion of new knowledge is investigated. Scale of diffusion of the received new knowledge can be estimated to a large extent on set of references of scientific articles of a considered file of magazines on the references which institutional address belongs to considered object. In the study was an analysis of the factors influencing the spread of new knowledge. Also in the given work the Russian system of production of new knowledge is considered specially and comparison with world regions allows revealing strengths and weaknesses of the Russian system of production of new knowledge.*

Introduction

Last 15-20 years even more often there is a speech about transition to the economy based on knowledge. The central process in this economy is manufacture of new knowledge. Development processes of reception of new knowledge and diffusion of this knowledge is represented a priority for industrially developed countries [1].

The given research is directed on studying of processes of manufacture and distribution of new knowledge. Thus manufacture of new knowledge (research and working out) is represented as some process with inputs and outputs. As entrance objects sources of new knowledge are considered, and as output objects - recipients of this knowledge.

In the work the diffusion of new knowledge is investigated. This knowledge is obtained as a result of the performance of fundamental and applied research. One of the estimations of the diffusion of this new knowledge is its scale of use and its influence on further process of knowledge generation by environment objects. The characteristics of new knowledge diffusion, in particular speed of knowledge distribution, are measured.

In the given work the Russian system of production of new knowledge is considered specially. Comparison of interactions at level of the Russia and world regions allows revealing strengths and weaknesses of the Russian system of manufacture of new knowledge. We are interested in the following regions of the world: the Western Europe (15 countries of the European Union¹), the Eastern Europe, the North America (the USA, Canada and Mexico), the Southeast Asia (South Korea, Singapore, Chinese Taipei and Japan), China and the Pacific region (Australia and New Zealand). The Russian Federation is separately considered.

Aim of the Project

A detailed study of the processes of production and distribution of new knowledge will allow identify the factors and weaknesses that have a negative impact on both the system production and distribution of new knowledge as a whole and its components on specific stages.

Hypotheses and Methodology

¹ amalkova@nes.ru, New Economic School, Central Economics and Mathematics Institute of RAS, Moscow, Russia

The main objective is to analyze the processes of production of new knowledge, assessing its effectiveness, and identify factors that have a decisive influence on functioning of these processes.

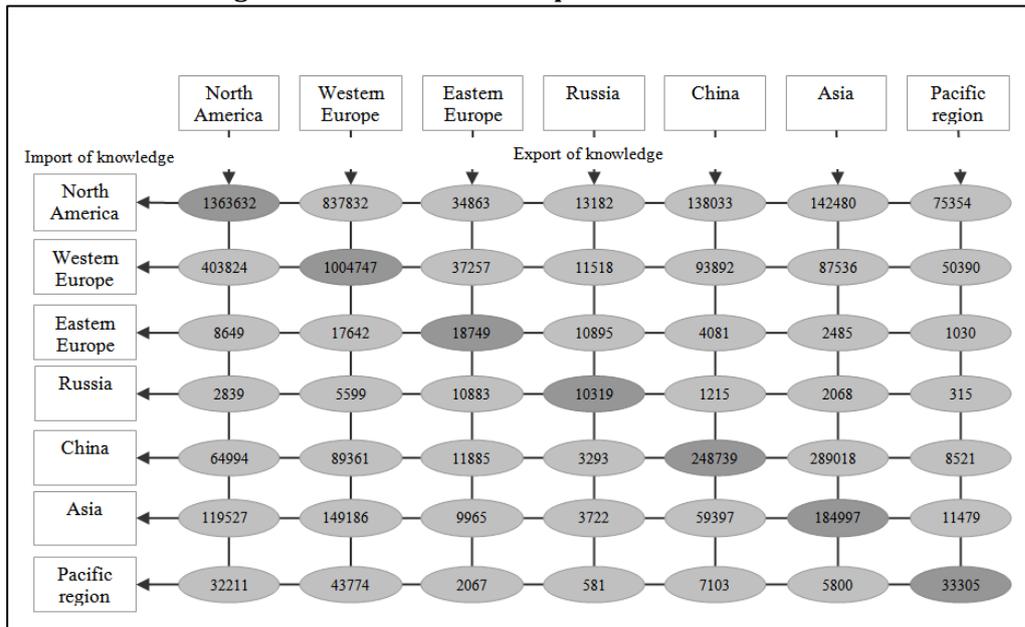
For the production process of new knowledge will be used approach "black box", where objects as input for this process focuses on the financial and human resources, and objects as output parameters - on patents and scientific publications [2]. At the analysis of input parameters of the process will be explored different levels of resource support of the process of knowledge production, including the institutional sector. In addition, research will be undertaken about flows of transfer and use of knowledge. In addition, based on the matrix will be investigated the processes of diffusion of new knowledge, determined the speed and efficiency of its transmission. Investigation of the processes of production and diffusion of new knowledge using it were decomposed into sub-processes. Studying the properties of each sub-process, as well as factors has a key impact on the efficiency and effectiveness of the processes of generation and distribution of knowledge. Also an object of the study is to identify the strengths and weaknesses of the Russian system of production of new knowledge.

The scale of diffusion of new basic knowledge can be estimated to a significant extent by the count of citations of the articles of considered journals files to literature sources which institutional address belongs to object examined. It means that, if the citation to a scientific article has taken place, the author quoted it has used the knowledge contained in this scientific article.

At the same time, at the given level of economic objects aggregation, the objects should be considered both as a source and a recipient of knowledge. The recipient consumes the knowledge that is generated by the external and internal sources. The source produces the knowledge for external and internal consumption. For every object studied, it is interesting to determine the total value of both export and import knowledge. The former means that the object plays a role of knowledge source and the latter implies that it can be a recipient of outside world knowledge too. The total knowledge export is determined by summing up the values of the knowledge transferred to external recipients, and correspondingly the total import is a result of adding up the values of the knowledge received from sources of knowledge that are external for this object. The role of elementary recipient of knowledge play an article that intuitionally belongs to the object-recipient and in which there is a reference to an elementary source. Here and below process of transfer of knowledge is meant a stream of knowledge from a source to the recipient where a source is the initial published scientific article, and the recipient – article in which there is a reference to the source. Thus, the exchange of knowledge is meant process of citing of the scientific article between an initial source of knowledge and the recipient who has absorbed this knowledge.

To analyze the process of knowledge transfer from a source to a recipient, it is convenient to present it in the form of a matrix of knowledge flows (Fig. 1). In this matrix, the inputs and outputs of the transfer process may be depicted by a columns and rows.

Figure 1. Matrix of knowledge flows based on articles published at 2007

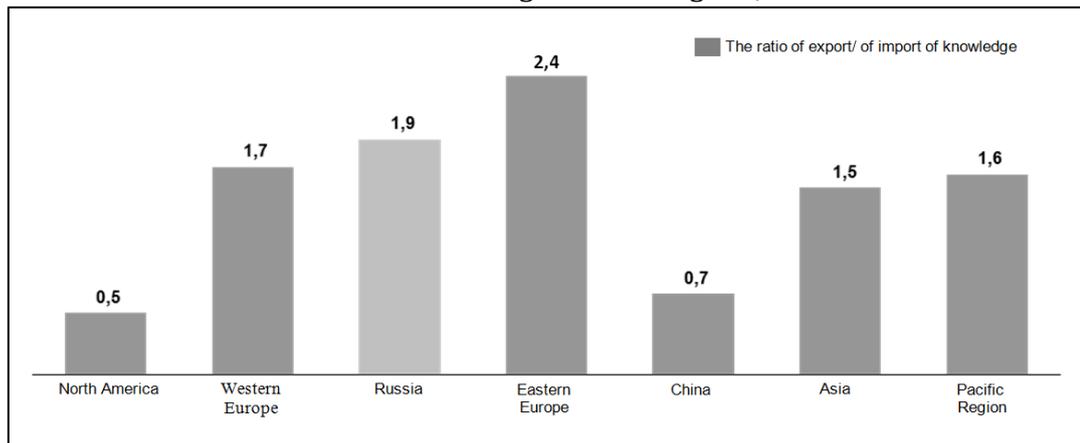


The matrix includes world regions like sources and recipients of knowledge. On the basis of the given matrix it is possible to determine the characteristics of intensity of the interaction of a separate region with an external world in processes of diffusion. This external world is regarded as a set of other global regions.

It is necessary to notice that indicators of internal citing for Russia are insignificant among the presented regions and make about 10 thousand references within 2007. Thus level of internal citing for Russia is commensurable with indicators of citing by Russia of countries of Eastern Europe. Presence of intensive interaction of Russia and the Eastern Europe by production of new knowledge is a consequence of the general Soviet past for these regions and the general bases of the Soviet science.

The balance between knowledge export and import is very interesting. For instance Eastern Europe is net exporter of knowledge, in other words, its diffusion of scientific activity results from region to external world is greater than knowledge propagation from the outside world (Fig. 2). To measure the value of region diffusion, let us define a knowledge diffusion coefficient of region. This coefficient is equal to the ratio of the region articles citations from the outside world to foreign articles citations from the region ones. In the outlined case, the knowledge diffusion coefficient is high.

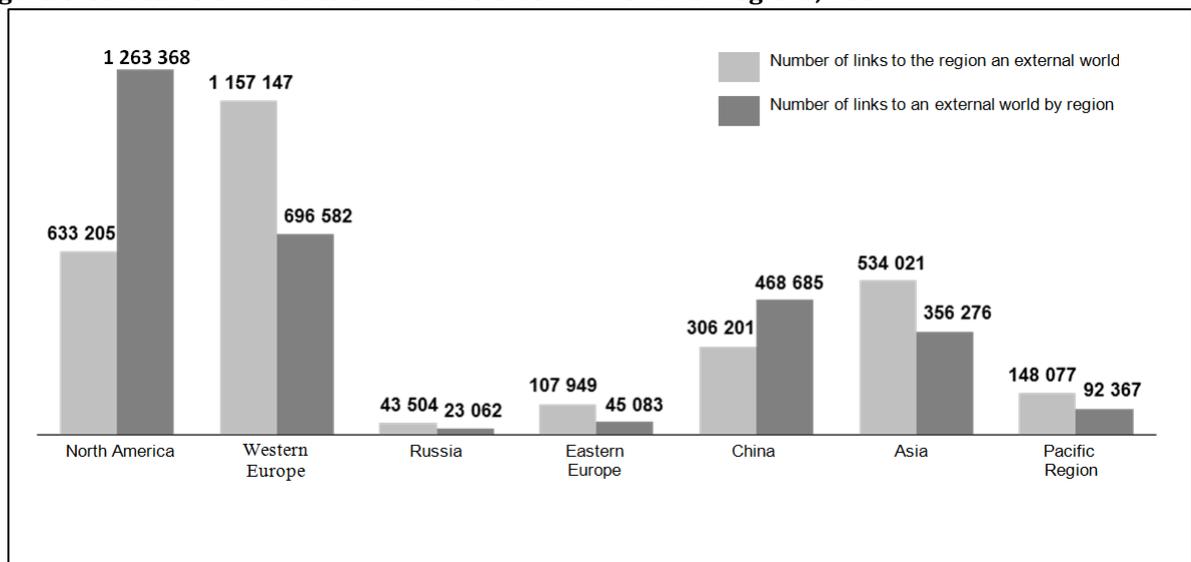
Figure 2. Coefficient of diffusion of new knowledge in world regions, 2007



The analysis the knowledge diffusion coefficient gives an opportunity to reveal roles of global regions in processes of knowledge transfer. It is easy to see that the majority of global regions are pure exporters of knowledge except of Northern America and China (Fig. 2). So, for example, it appears that Russia exports knowledge twice as much more than it absorbs, and Eastern Europe is the largest knowledge diffuser (it has the greatest coefficient of knowledge diffusion among considered regions). Two importers of knowledge are Northern America and China.

For each of the mentioned regions it is rational to measure a force of its interaction with the external world in processes of transfer of new basic knowledge. This force of interaction of the region with its external world can be calculated as a sum of its import (quantities of citations of the region to the external world) and export (quantities of citations to the region from the external world) new knowledge (Fig. 3). Comparison of world regions on force of interaction has revealed that Russia is the outsider with the lowest indicators of citing among considered regions. Even despite the close Soviet past of country of Eastern Europe had time to be integrated more productively into the scientific world community rather than Russia.

Figure 3. Structure of interaction with the external world for regions, 2007.



China and the North America have prevailing value of quantity of references to an external world over references to region an external world. It is necessary to notice that the North America shows the greatest indicators of citing in the world. So the quantity of references to an external world region exceeds 1.2 million references for 2007. Thus indicators of citing of region an external world are in 2 times more low. Indicators for China are not so essential in comparison with the North America, which has about 0.4 million references to an external world region and 0.3 million references to region an external world.

Picture of interaction of countries of Western Europe with the world is a mirror opposite to structure of interaction of the North America with the world. Thus countries of Western Europe also show the highest indicators of citing as external world and citing of region by an external world.

The least indicators of citing for Russia are especially allocated. They are in 2 times below indicators of interaction of the Eastern Europe with an external world and in 3 times below similar indicators of Pacific region.

It is necessary to notice that so low indicators of citing of Russia are connected in many respects with various barriers. The low impact-factor of the Russian magazines concerns such barriers that in turn affects number of the Russian magazines considered by the largest database «Web of science», where is presented about 150 Russian magazines according to 2010 (about 1,25 % of all magazines). The low impact-factor of the Russian magazines is connected with low level of citing of articles published in these magazines. Problems of bad citing of articles can be connected as quality of given articles and with ineffective system of the account of knowledge of the new knowledge used for manufacture. Thus the low impact-factor of the Russian magazines testifies to weak diffusion of knowledge in the country.

Other factor negatively affecting spread of knowledge made by the Russian scientists is that fact that the majority of Russian articles «Web of science» are published in the international database in Russian [4]. For comparison in China in 2007 among magazines considered «Web of science» it has been published about 7 % of articles in the Chinese language and about 93 % of articles in English. Thus using in publications a universal international language removes barriers to an effective exchange of the made knowledge.

Despite the least indicators of citing for Russia the factor of diffusion of new knowledge is one of the greatest among the presented regions. Given result is a consequence of the big difference between level of citing of Russia an external world and level of citing of an external world Russia.

In the research also the speed of knowledge propagation for each region is investigated. The average amount of citations falling on one article in a year is taken as a speed measure of knowledge propagation from the region that presents a source in this year. The analysis of speed of knowledge propagation as a function of time has shown that the active distribution of knowledge contained in an article takes place during nearest 2-3 years after the publication of the article. After the expiration of this period there is a sharp decline of the interest to the content of the article. The given analysis allows the global regions being examined to inter compare on the speed of propagation of the knowledge generated by them. North America has the high speed of basic knowledge diffusion, and Russia and the East Europe are regions with the low speed (Fig. 4). But, at the same time, it is worth

noting that indicators of knowledge propagation speed in Russia show constant growth.

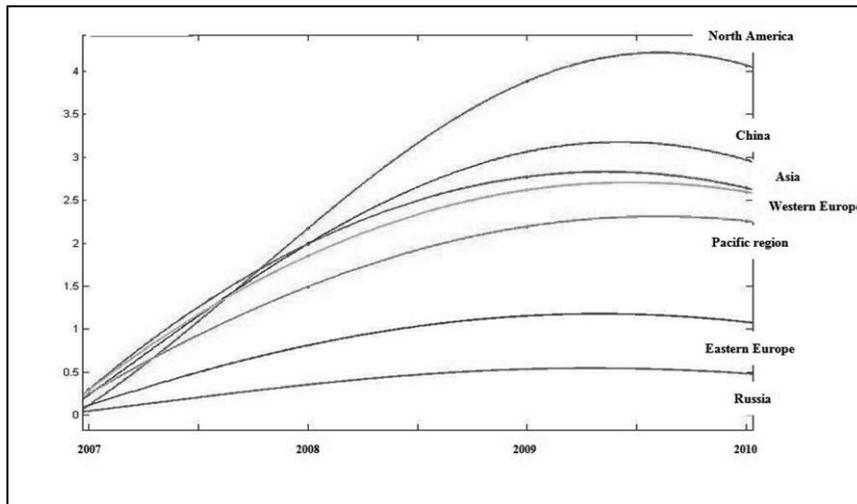
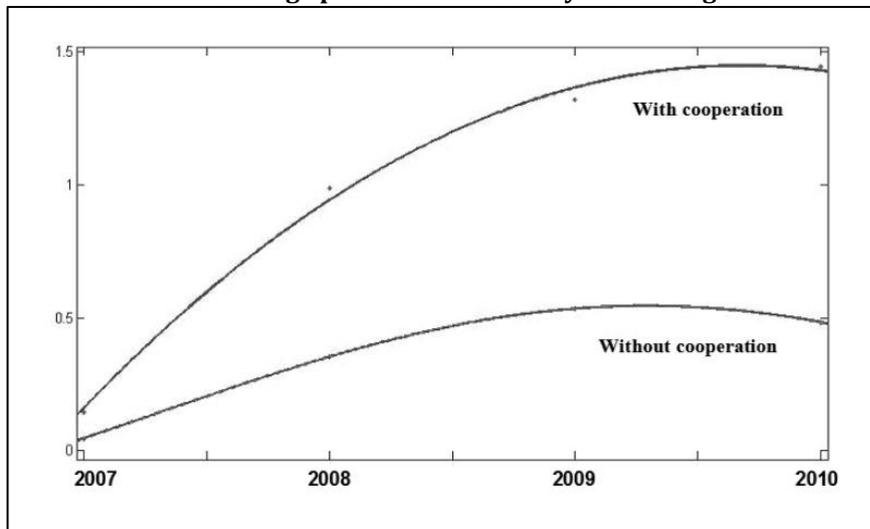


Fig. 4. Distribution of new knowledge published in 2007.

It is worth noting that the writing articles in cooperation with foreign colleagues increases the speed of propagation of the knowledge being generated in one article. This means, that the average amount of citation of a cooperative article is higher than the amount in the article written by residents of the country without cooperation. As for Russia, the cooperation in the processes of generation of new knowledge multiplies the speed of knowledge propagation three times as much (Fig.5).

Figure 5. Distribution of new knowledge published in 2007 by worlds regions



Results

Modern bibliometry allows measuring processes of creation and an exchange of knowledge in the various countries and regions. Analysis of international interactions showed that the main consumers of knowledge is the North America and the Western Europe, as regards the production of knowledge the Western Europe remains the largest producer of knowledge, but in the technical and applied sciences the China has the same level. The overall level of the China with the Southeast Asia exceeds the level of the Western Europe; also the China dominates in

this bunch. For the Southeast Asia and the China, as well as to the Russia, the prevalence of the natural science and the engineering and applied science in the consumption and production of knowledge. Meanwhile, the China is a leader in these sectors compared to the Southeast Asia, the Russia has a rather weak position in patterns of production and consumption of knowledge in comparison with other regions of the world, even in those industries in which it seeks to be the leader (in particular, the natural sciences).

It is necessary to notice that so low indicators of citing of Russia are connected in many respects with various barriers. First of all it's a low impact-factor of the Russian magazines. This fact is connected with low level of citing of articles published in these magazines. Problems of bad citing of articles can be connected as quality of given articles and with ineffective system of the account of knowledge of the new knowledge used for manufacture. Thus the low impact-factor of the Russian magazines testifies to weak diffusion of knowledge in the country. Other factor negatively affecting spread of knowledge made by the Russian scientists is that fact that the majority of Russian articles «Web of science» are published in the international database in Russian. The last reason it's low level of cooperation with foreign colleagues.

The analysis has shown that Russia hasn't had time to be integrated into the world scientific community, as for Russia the basic indicators of citing lower in comparison with considered world regions. Lower level of diffusion of the knowledge is connected with it, not repeating fast-growing curves of other regions.

References

Golichenko OG (2006) National innovative system of Russia: a condition and development ways. Moscow: Science

Golichenko OG, Prihodko AA. (2008) An estimation of research activity in Russia and abroad. Conference works «Civilization of knowledge».

Varshavskij AE (2004) ch. «Scientific potential a basis of innovative development: problems of reforming of the Russian science» in book «Innovative management in Russia: Questions of strategic management and scientifically-technological safety» (Heds of a group of authors VL.Makarov, AE.Varshavsky) Moscow: Science, 2004.

Varshavskij AE, Markusova VA (2009) It is spent with mind. Productivity of scientific work in Russia above, than in America. Search, on May, 22nd, 2009, №21, p. 14.

Golova IM, Suhovej AF (2005). Preservation of a branch science as necessary element of domestic innovative system. Innovations № 3 (80), April, 2005.

OECD , Frascati manual : The Measurement of Scientific and Technological Activities. Proposed Standard Practice for Surveys on Research and Experimental Development. - Paris, 2002. - 256c.

OECD, Main Science and Technology Indicators. - Paris, 2002. - 31c.

Jonathan Adams, Christopher King «Global research report. Russia. Research and collaboration in new geography of science», Thomson Reuter, January 2010

Jonathan Adams, Christopher King, Nan Ma «Global research report. China. Research and collaboration in new geography of science», Thomson Reuter, November 2009

Ostapenko, Nataliia¹: Influence of National Culture on the Opportunistic Behavior of Business: a Comparative Analysis of Survey Data

***Abstract:** This paper tends to examine causes of opportunistic behavior by small business, namely influence of national culture on process of development of small business. The main difference from similar research is that it is used an original survey data. The paper is investigated the role of cultural factors in way of perception by companies the rules of the game and formation of appropriate behavior. In the work the effect of national culture on the perception by entrepreneurs of opportunistic behavior and formal rules of the game (laws, regulations) which in turn determines the efficiency of small business development at the national level is determined. Method of measuring the impact of culture on the perception of opportunistic behavior by small business is regression analysis. On the basis of this study it will be possible to draw conclusions and make recommendations to fight opportunistic behavior of entrepreneurs on the basis of coherence of formal and informal rules.*

Introduction

In this work it is planned to highlight the causes of unfair business behavior in the national economy. In this case, the determining factors are the factors from the perspective of new institutional theory: entrenched for a long time national culture, the perception of entrepreneurs formal rules of the game (of the laws), the efficiency of government. Traditional and new institutional theory determines that informal institutions (informal norms of behavior, in forms of habits, customs, mentality and cultural patterns of conduct that shape the behavior of people in society) have a significant impact on economic development. Informal institutions are unique to a particular model of the national economy, and the influence of these institutions can negate the effect of any law that could lead to an institutional trap and reduce the effectiveness of national economic development. Knight (1997) pointed out that «we cannot assess the rationality of individual action without taking account of the institutional and cultural the context in which everyday decisions are made».

Institutions in particularly define what actors can do, what is expected from them, or they must do, and what is advantageous for them. In this way, they give stability and predictability to economic interaction (Dallago, 2000). In institutional terms, enterprise behavior is understood as a reaction to inadequate formal and informal institutions leaving little scope to explain emergent behavior (Welter, 2002). Because extensive research at the individual level of analysis shows a link between values, beliefs and behavior, it is plausible that the differences in national culture in which these values and beliefs are imbedded, may influence a wide range of behaviors (Mueller and Thomas 2000). Using this logic, several studies have explored the relationship between various aspects of culture and entrepreneurial behavior across cultures (McGrath and MacMillan 1992; Mueller and Thomas 2000).

¹ natayal107@mail.ru, National Tavrida V. I. Vernadsky University, Ukraine

Informal institutions shape the interpretation of the entrepreneurs of formal rules of the game, i.e. determine their effectiveness. The sociocultural environment influence entrepreneurial attitudes and motives, the resources that can be mobilized as well as the constraints and opportunities on/for starting and running a business (Martinelli, 2004).

This study will complement the theory of entrepreneurship and on its basis will be possible to generate measures to combat unfair business behavior.

Aim of the Project

This research aims to explain whether national culture has impact on development of small business sector in field of opportunistic behavior. Since the basis of opportunistic behavior is business perception of existing institutional environment in the national economy (national culture), it will be investigated the role of national culture and its role in the effectiveness of different methods of combating corruption. As defined in the economic literature, corruption can be seen as a key indicator of institutional failure.

This study proves the importance of integrating existing informal rules of the game with the introduction of new legislation or new regulations, as currently developed measures to fight corruption are designed only by borrowing them from the experience of other countries, not taking into account national institutional environment.

Hypotheses and Methodology

By using regression analysis based on survey data, it is planned to consider the influence of national culture on the perception of the possibility of usage of opportunistic behavior by entrepreneurs, government action, and forming their own behavior within the existing institutional framework, determining the causes of corrupt behavior among entrepreneurs. This analysis will also examine the relationship of formal and informal rules of the game. The main factors influencing both business developments process from the perspective of the national economy and affecting the perception and reaction to the formal rules in the economy will be identified.

Research hypothesis

National culture influences the perception of the existing rules in the field of entrepreneurship, as well as the degree of agreement/disagreement with these rules, which are formed on the basis of the subsequent behavior of entrepreneurs, as well as assessment of the feasibility and acceptability of opportunism.

Data

A number of conceptualizations have been offered in the literature to identify and measure dimensions of national cultures (e.g., Hofstede, 1980; Schwartz, 2005). The most popular among them are Hofstede and World Value Surveys Inglehart, R. (2000). Scientists also use data of Global Entrepreneurship Monitor (GEM), BEEPS and World Development Indicators database of the World Bank.

Using the above data in the study is disadvantageous due to several constraints. First, these data are no direct surveys of opportunistic behavior of

entrepreneurs. Second, heterogeneity of the sample firms in these studies may cause bias in the estimation of the parameters.

The sample comprised small, medium and large corporations. The survey included 32 questions. Following groups of questions were asked:

Personal characteristics of respondents (age, religion, education);

Characteristics of enterprises (location, type of enterprise, industry);

Perception of existing norms and rules (the government's actions in the field of entrepreneurship effective, etc.);

Perception of opportunistic behavior (If the state is corrupt, business will acceptable to leave in shadow economy, etc.);

Agreement with existing formal institutions at the national level (I agree with the current legislation in the field of entrepreneurship, etc.).

Regression model in this case will be as follows:

$$Op = \alpha + \beta_1 Pers + \beta_2 Enterp + \beta_3 Rul + \beta_4 Agr + \beta_5 Cul + \varepsilon \quad (1)$$

Where,

Op - perception of opportunistic behavior by entrepreneurs;

Pers - personal characteristics of respondents;

Enterp - characteristics of enterprises;

Rul - perception of existing norms and rules;

Agr- agreement with existing formal institutions;

Cul – indicator of national culture (propensity to unfair behavior).

Results

To study the influence of national culture on opportunistic behavior, we conducted a survey between enterprises in Slovakia and Ukraine. The survey sample consisted of 6000 randomly selected enterprises. Surveys were distributed in the autumn of 2013. Of the 6000 surveys distributed, 300 were returned, for a response rate of 5 percent.

According to the research, it was built five regression models for each country by OLS using the step selection, i.e. only the significant coefficients in the regression model were retained.

In Slovakia, the main predictors of opportunistic behavior of business are: «Tax evasion may be acceptable» (positive impact in three models of five), «I'll do anything to achieve goals (make a profit)» (in three of the five models, two of them with a positive sign), «If the law is not perfect, its violation will be acceptable» (positive effect, in two models of the five), «Will your company develop more effective with changing legislation in this area» positive effect in two models out of five), «I am convinced that my extra effort will pay off» (positive effect in one model of five), «Public goods in the state are allocated effectively» (negative sign in one of the five models), «Your age» (negative sign, in one model of five), «Business activities in my country is over-regulated» (positive impact in one of five models).

These results opportunistic business in Slovakia can be represented by the following model:

$$Op = \alpha + \beta_1 Rul + \beta_2 Cul + \beta_3 Agr + \beta_4 Pers + \varepsilon \quad (2)$$

Where, Op - perception of opportunistic behavior by entrepreneurs;

Rul - perception of existing norms and rules,

Cul – indicator of national culture (propensity to unfair behavior);

Agr- agreement with existing formal institutions;
 Pers – personal characteristics of the respondent (age).

In Ukraine, the main predictors of opportunistic behavior of business are: «If the law is not perfect, its violation will be acceptable» (positive effect, in two models of five) , «I am stubborn man» (negative sign, in two models of five), «Business despite of everything must act within the law» (negative sign, in two models of five), «The government's actions in the field of entrepreneurship are effective» (negative sign, in one model of five), «I used to work only for myself» (positive sign, one of five models), «Business activities in my country is over-regulated» (negative sign in one of five models), «Will your company develop more effective with changing legislation in this area» (negative sig , in one model of five).

$$Op = \alpha + \beta_1 Rul + \beta_2 Pers + \beta_3 Agr + \beta_4 Cul + \varepsilon \quad (3)$$

Where, Op - perception of opportunistic behavior by entrepreneurs;

Rul - perception of existing norms and rules;

Pers – personal characteristics of the respondent (tenacity);

Agr- agreement with existing formal institutions;

Cul – indicator of national culture (individual characteristics of opportunism).

As can be seen from the data models, explanatory factors of opportunistic behavior of entrepreneurs are similar between the studied countries. In particular the most important indicators of opportunistic behavior of business are: view of government actions, cultural (ability to unfair behavior), agreement with current legislation, personal characteristics.

The same significant factors identified when checking depending opportunistic behavior according to European Values Surveys, where Valid N more than 1200.

To analyze the impact of latent indicator of national culture on opportunistic behavior of business SEM models were built with using survey of enterprises.

Figure 1. SAM model “Influence of culture on opportunistic behavior of business”. Ukraine sample.

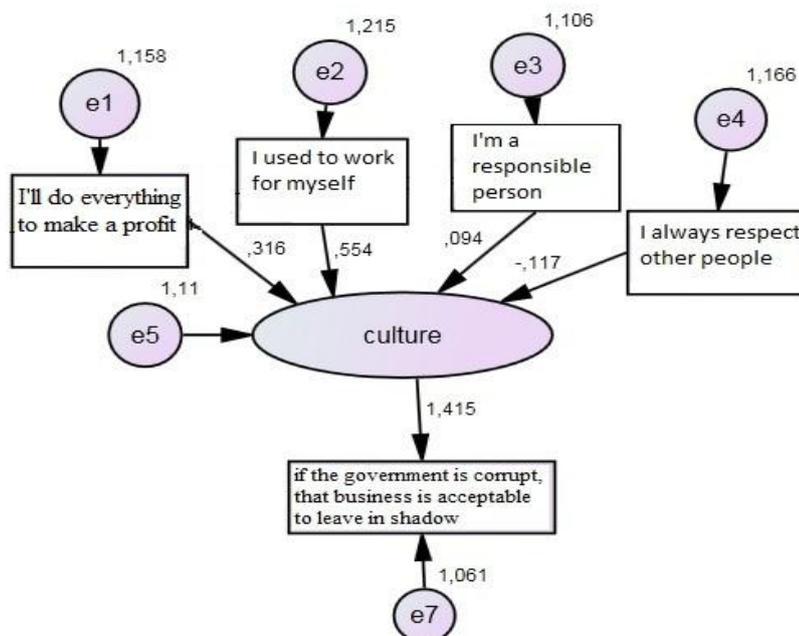
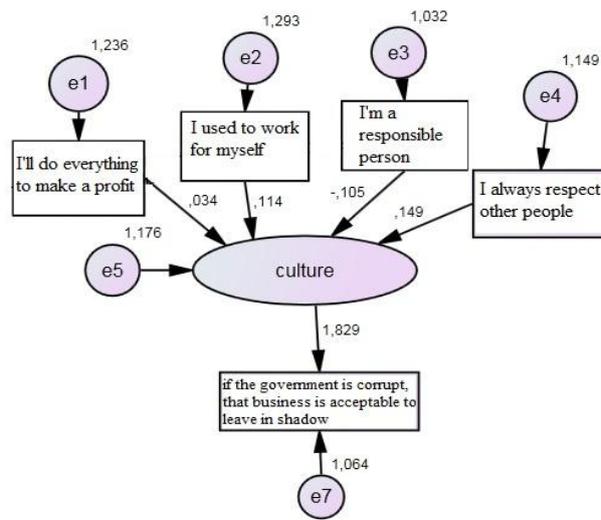


Figure 2. SAM model “Influence of culture on opportunistic behavior of business”. Slovak sample.



Characteristics of the sample.

Figure 3. Surveyed enterprises between Slovakia and Ukraine

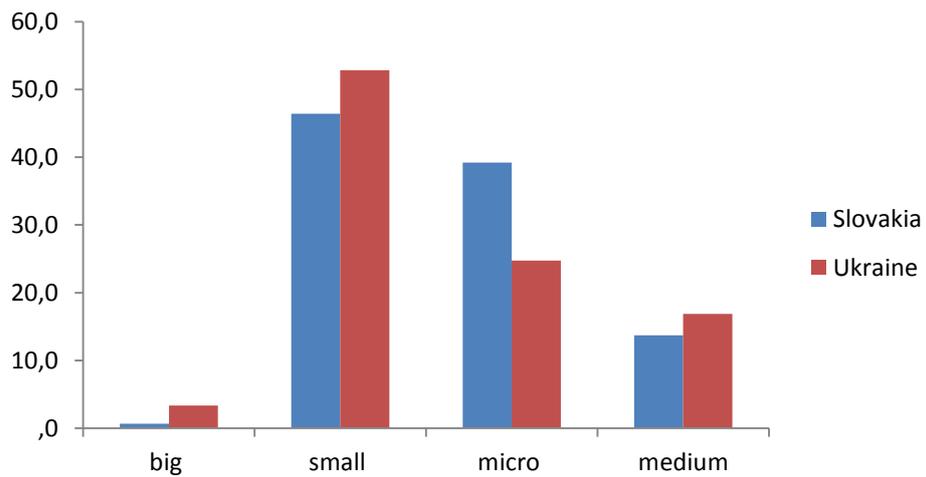


Figure 4. Spheres of surveyed enterprises

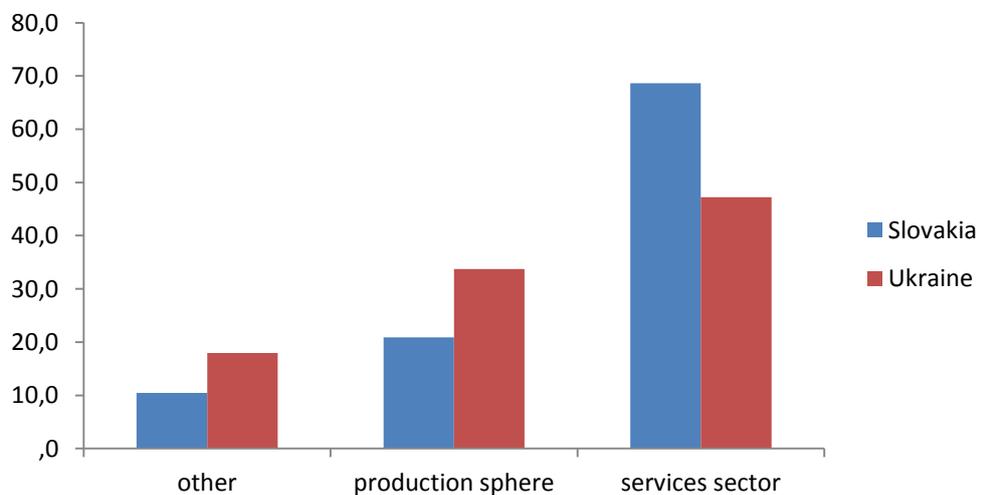
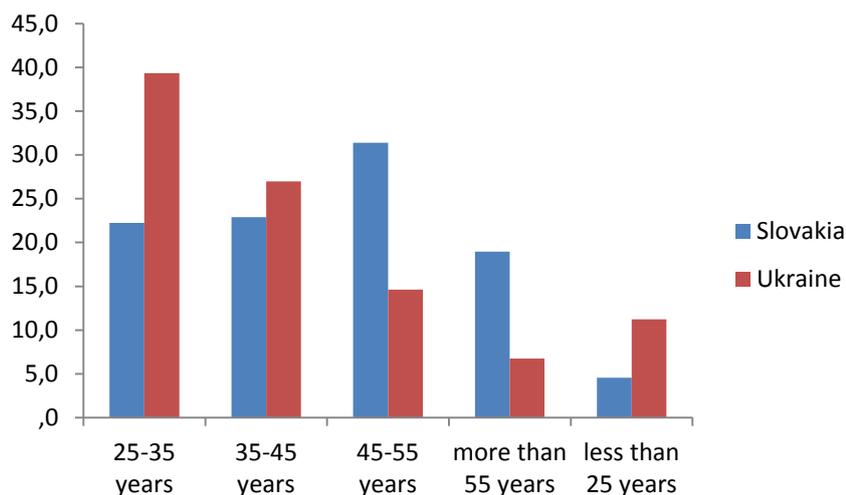


Figure 5. Ages of entrepreneurs



References

Dallago, B. The Organisational and Productive Impact of the Economic System. The Case of SMEs, in: *Small Business Economics*. 2000. №15, pp. 303-319.

Inglehart, R. et al "World values surveys and European values surveys, 1981-1984, 1990-1993 and 1995-1997", Ann Arbor-Michigan, Institute for Social Research, ICPSR version. 2000

Knight, J. Social institutions and human cognition: thinking about old questions in new ways *Journal of institutional and Theoretical economics* 1997. 153, 693-699

Licht, A.N., Goldschmidt, C., Schwartz, S.H., Culture, law, and corporate governance. *International Review of Law and Economics*. 2005. №25, pp. 229-255.

Martinelli, A. The Social and Institutional Context of Entrepreneurship in Crossroads of Entrepreneurship. New York: Springer. 2004. pp. 58-74.

McGrath, R., MacMillan, I., More like each other than anyone else? Across-cultural study of entrepreneurial perceptions. *Journal of Business Venturing*. 1992. №7 (5), pp. 419-429.

National cultural dimensions Available at: <http://geert-hofstede.com/national-culture.html>

Thomas, A. & Mueller, S., A case for comparative entrepreneurship: assessing the relevance of culture. *Journal of International Business Studies*. 2000. №31(2), pp. 287-301.

Welter, F. Trust, Institutions and Entrepreneurial Behaviour. Bremen: Research Centre for East European Studies (FSOE). 2002

European Values Surveys Available at: <http://www.europeanvaluesstudy.eu/>

Ostrovnaya, Maria¹, Podkolzina, Elena²: E-auctions as a way to eliminate favoritism in public procurement³

Abstract: *Favoritism is a wide-spread problem in many countries, especially in public procurement. In order to decrease prices and to struggle favoritism the government can introduce e-auctions. E-auctions are treated as a way to raise competition through increased transparency and lower participation costs. However the evidence of their effectiveness is rare and ambiguous. This project examines the impact of auction format (traditional open auction or e-auction) on favoritism in Russian public procurement. We built a theoretical model that investigates how the type of the auctioneer (procurer or third party) influences the scope of favoritism. This project contributes to the current corruption literature and literature on auctions.*

Introduction

Public procurement constitutes 10-25% of GDP⁴ and a significant share of domestic demand in most countries, and Russia is no exception⁵. These huge financial resources can be used to achieve various purposes: provision of goods and services, fostering innovation and small business development, etc. Corruption can hinder this, so it is the problem of high importance in public procurement. Laffont and Tirole (1991) have shown that a price auction reduces corruption opportunities, because the auctioneer cannot distort the quality characteristics of bidders. However the distortion of quality assessment is not the only corruption mechanism, so the Russian practice does not fully support conclusions drawn from this model.

In 2006 there was a reform of public procurement in Russia, and the auction became a priority procurement procedure. Although the scope of corruption in public procurement has decreased, favoritism is still prevalent. We define favoritism as behavior of a public procurer, which restricts competition in order to let his preferred bidder win the auction. Illegal long-term relations between the Moscow government and the company of Moscow ex-mayor's wife (Mironov and Zhuravskaya, 2011) are the most famous, but not the only example. Such cases take place in all Russian regions and at all levels of public administration. That is why we consider favoritism as a key form of corruption in Russian public procurement. Since 2008 the Federal antitrust service is promoting electronic procurement procedures⁶. The main pro argument is that transparent electronic procedures can mitigate corruption and hence fix part of the "wasteful procurement" problem⁷. Nowadays e-auctions are widely adopted in Russia, but there is still rare evidence of their advantages (e.g. Garicano & Kaplan, 2001), especially as anticorruption tool.

¹ maryostrovnaya@mail.ru, Center for Institutional Studies at the National Research University Higher School of Economics, Moscow, Russia

² pea.work@gmail.com Center for Institutional Studies at the National Research University Higher School of Economics, Moscow, Russia

³ The study was implemented in the framework of the Basic Research Program of the Higher School of Economics in 2014.

⁴ <http://ec.europa.eu/trade/policy/accessing-markets/public-procurement/>

⁵ <http://www.gks.ru/metod/torg.html>

⁶ http://fas.gov.ru/analytical-materials/analytical-materials_18387.html

⁷ http://fas.gov.ru/fas-in-press/fas-in-press_28291.html

These recent changes and the gap between economic theory and Russian practice motivate our project.

Aim of the Project

The main goal of this project is to examine which auction format is more efficient and leads to smaller social loss from corruption: traditional auction or e-auction. We believe that such differences between these auction formats, as the distribution of information between bidders and the auctioneer type (procurer or e-platform), affect auction outcomes.

Hypotheses and Methodology

We are going to build a theoretical model that is based on Laffont and Tirole's model and reflects the key differences between traditional auction and e-auction. The form of both auctions is reversed English auction with open reserve price. Procurement practices were changing in time, so we describe the main differences between auction formats, when they were well established. Firstly, bidders compete anonymously in e-auction, while in traditional auction everyone knows their competitors. Therefore, in traditional auction each bidder can costless obtain information about previous auctions and (at least) roughly calculate costs of his competitors. In highly concentrated market, e.g. gasoline market, this analysis is even excessive, because companies know production costs of each other. When several bidders have low production costs, each of them makes a bid that equals to his production costs in traditional auction. In contrast, in e-auction each bidder with low production costs makes higher bid: if the other bidders are less efficient, he gets positive payoff; otherwise he gets zero payoff.

Secondly, in traditional auction a public procurer is the auctioneer, while the auctioneer of e-auction is e-platform. Both of them can abuse their authorities. In contradiction to Laffont and Tirole (1991), we suppose that a public procurer can establish the quality requirements for all bidders. If a bidder meets these requirements, he can participate in traditional auction or e-auction; otherwise his application is rejected. So the public procurer can make a corrupt deal with one bidder, impose quality requirements that he surely meets and reject applications of other bidders¹. The public procurer prefers one bidder (the preferred bidder) to others, for instance, a bidder with excellent reputation to newcomers, or a bidder from the same region to foreign bidders. The public procurer and his preferred bidder have successful long-term relations or informal connections that help to enforce a corrupt deal, and he does not accept a bribe from other bidders. In e-auction another type of corruption may also arise. As an intermediary between a public procurer and bidders, e-platform has unique access to the facilities, which allows her to block the bids of bidders. In order to maximize her payoff, e-platform can demand bribes from bidders in exchange for the assistance in winning e-auction. In contrast to the public procurer, e-platform does not have any preferences regarding the bidder; interaction between them is single and practically anonymous. Hence, e-platform can receive a bribe from each bidder and does not prefer one of them to others.

¹ For instance, Søreide (2002), Boehm and Olaya (2006) describe that public procurers can manipulate public contract and restrict competition before the auction.

For the sake of simplicity we assume that there are two bidders (the preferred bidder and the honest one), they can have high or low costs and high or low quality with equal probabilities. If there is only one bidder in auction, he wins it at the reserve price that is established by the government and open to public. First of all, we consider situation with the benevolent auctioneer, when the only difference between auction formats is the distribution of information between bidders. The expected utility of the public procurer positively depends on the product quality; therefore he wants to purchase only high-quality products. Then we add to the model favoritism of the public procurer in traditional auction and e-auction. Finally, we consider e-auction with both favoritism and market corruption.

Table 1 presents the timing of the complete game.

Table 1. Timing

Traditional auction	E-auction
Bidders realize their production costs and the type of quality.	
The preferred bidder gives information about his quality to the public procurer and they can make a corruption deal.	
The public procurer specifies quality requirements and announces the auction. If the procurer has made a corruption deal with the preferred bidder, he specifies the quality requirements so that $S_{PROC} = S_1$.	
Traditional auction. If a bidder does not meet the quality requirements, he cannot participate in auction.	If there are two bidders, e-platform organizes a bribe auction.
The public procurer announces the results of auction, buys a product and receives a bribe (if he has made a corrupt deal).	E-auction. If a bidder does not meet the quality requirements, he cannot participate in auction. If $\max\{b_i\} > 0, i = 1, 2$, than the bidder that has offered higher bribe wins e-auction, another bidder cannot make a bid. If the bids are equal, e-platform randomly chooses the winner of a bribe auction.
	The public procurer announces the results of auction, buys a product. Public procurer and e-platform receive bribes (if they have made corrupt deals).

Results

We find first-best solution with the benevolent auctioneer and equilibrium with favoritism and compare them. Our model shows that there are essential differences between the outcomes of e-auction and traditional auction, which arise from (lack of) anonymity of bidders and the type of auctioneer (procurer or e-platform). Firstly, we find out that if public procurement is immune to corruption, the auction format has impact on the amount of public spending, but does not affect social welfare. If both bidders are efficient, in e-auction they compete anonymously, so the bids are higher than their production costs. In contrast to it, in traditional auction they get zero payoffs due to the open information about costs of each other.

Secondly, unlike traditional auction where only public procurer can restrict competition and take bribes, e-platform can also behave opportunistically in e-auction. The corruption behavior of procurer and e-platform is different in the mechanism of bidders' discrimination (quality requirements or blocking the bids) and the type of corruption client (the preferred bidder or more efficient bidder). In

the further research we are going to analyze this situation and find out what auction format (traditional auction or e-auction) is better for the social welfare. We hypothesize that it is harder to sustain illegal long-term relations between the public procurer and his preferred bidder in e-auction, because of the e-platform that can block the actions of bidders in exchange for a bribe. There are two ways when the public procurer and his preferred bidder are managed to keep these long-term relations. First is the case when the preferred bidder is extremely effective and the public procurer establishes high requirements for the quality so that no one else can participate in e-auction. The allocation of contract is efficient, but the public spending is high and the society receives damage from corruption. Second is the case when the public procurer and the preferred bidder can collude with e-platform. In our opinion, current situation in Russia partly illustrates this case. Otherwise there is no favoritism in e-auction, but the market corruption can occur.

References

Boehm, F., & Olaya, J. (2006). Corruption in Public Contracting Auctions: The Role of Transparency in Bidding Processes. *Annals of Public and Cooperative Economics*, 77(4), 431-452.

Garicano, L., & Kaplan, S. N. (2001). The Effects of Business-to-Business E-Commerce on Transaction Costs. *The Journal of Industrial Economics*, 49(4), 463-485.

Laffont, J. J., & Tirole, J. (1991). Auction Design and Favoritism. *International Journal of Industrial Organization*, 9(1), 9-42.

Mironov M., Zhuravskaya E. (2011). Corruption in Procurement and Shadow Campaign Financing: Evidence from Russia. SSRN Working Paper No. 1946806.

Søreide, T. (2002). Corruption in Public Procurement. Causes, Consequences and Cures. Chr. Michelsen Institute Development Studies and Human Rights 1, 1-43.

Ovsiannikov, Kostiantyn¹: Japanese Corporate Culture as a Prerequisite towards Overcoming the Economic Recession of 1990-2000s

***Abstract:** After the break of the Bretton Woods system and the following oil-shocks in 1970s Japan was the only industrialized country that didn't react to this global political-economic shift by cutting employment rates. In return for job security employees were offered to accept new rules of remuneration and a revised working hours' account. The latter was also complemented by the distinct managerial strategies as well as long-term financial commitments between enterprises and banks. The 1990s bubble burst and the following recession of Japanese markets have posed a question of whether the aforementioned lasting networks can secure Japan's macroeconomic performance. In this regard, one can already see how the current anti-deflationary measures taken by the Japanese Central Bank in frames of a broader 'Abenomics' vector again rely upon the ties that used to synchronize social and economic behavior before 1990s. The large keiretsu enterprises together with their partner banks have become the main agents of the Japanese industrial policy. This gives us evidence of the financial pillar of the 'companyist compromise' – the essential part of the Japanese corporate culture – regaining its relevance.*

Introduction

After the break of the Bretton Woods system and the following oil-shocks in 1970s Japan was the only industrialized country that didn't react to this global political-economic shift by cutting employment rates. In return for job security employees were offered to accept new rules of remuneration and a revised working hours' account. The latter was also complemented by distinct managerial strategies (just-in-time production, quality control circles, zero defect movement etc.). These techniques have gained wide popularity among Western countries that considered the major pillars of Japanese management – customability and reusability, developed intensively within a certain environment – to be alternatives to the American extensive cross-sharing model. These strategies, in turn, have been displays of the *companyist compromise*, nurtured within the Japanese industrial system. The 1990s bubble burst and the following recession of Japanese markets have posed a question of whether the aforementioned lasting networks can secure one's macroeconomic performance. In this regard, it would be interesting to look, to what extent current anti-deflationary measures taken by the Japanese Central Bank in frames of a broader 'Abenomics' vector can rely upon these long-lasting ties that used to synchronize social and economic behavior before 1990s.

Aim of the Project

To investigate to what extent Japanese corporate culture can determine the political-economic actions that are directed towards overcoming the 1990-2000s' economic crisis.

¹ k.ovsiannikov@gmail.com, University of Kassel, Germany

Hypotheses

Peculiar social structure of Japanese society and its labor in particular has brought forth a *companyist compromise* that keeps on pertaining to Japanese corporate culture in spite of institutional changes in management-labor relations caused by the 1990s' financial crisis.

The companyist compromise should therefore be considered not only from the institutional point of view (industrial strategy developed in the interwar period) but as a display of the inherent communicative patterns. The latter, due their cultural embeddedness, cannot be abandoned as a consequence of the economic distortions. Instead, they would rather adjust themselves to the new challenges of globalization by providing trust-networks that would come capable for reviving domestic demand as well as investment capacity, thus making Japanese goods internationally competitive. This, in turn, would help Japan to win 'the war on deflation' and thus overcome a long-lasting recession.

Definition of the term 'companyist compromise': "The companyist accord rests on two pillars, the *labour-management compromise* and the *financial compromise*, and builds isomorphic and complementary structural relationship which exists between the two" (Yamada 2002: 20). The first pillar represents the entrenched exchange, where workers receive life-long protection and guarantees against discharge, but agree instead on carrying multifold responsibilities. The second, financial compromise, owes its existence to the fact, that industrial *keiretsu* groups have their own partner-banks. Thus, "the strong, long-term relations between labour and management, and between companies and their banks... [are the] relations of trust and cooperation that serve as security networks, enabling the economy as a whole to achieve high efficiency" (ibid: 27-28).

Theoretical Approach (Methodology)

There exist two basic views upon the nature of long-term labor relations in Japan. The first ascribes the lasting compromise between capital and labor to the inherent Japanese *cultural* peculiarities (Abbeglen 1979). Another view underlines the *economic* motivation that dominates at Japanese enterprises in a way of enforced cohesion between managers and employees aimed at international competitiveness (Yamada 2002: 21). The 1990s 'lost decade', called so due to the continuous recession that followed after the bubble burst, has put a question of whether the compromise can be preserved, facing the need for institutional changes aimed at recovery. High rates of unemployment during 1990s were the proofs of the compromise losing its former power.

However, the evidence shows that it's not easy to abandon the nurtured cultural (and thereby social) relations in the name of economic deregulation. That means that we have to investigate into this vital dependence from the socio-cultural context that is being reproduced through current political-economic actions.

1. Granting this, the first theoretical framework can be classified as *cultural-sociological*. It will enable us to analyze the nature of the companyist compromise that makes up a fundament of a modern political economy of Japan. The number of

sociologists shares the view about the priority of collective values in Japanese society over individual ones (Ashkanasy et al. 2004: 288). However, on the level of a more precise focus on the phenomenon of 'contextualism' some principal remarks should be drawn. In this regard the concept called '*relatum*' is applied (Hamaguchi 1996: 341).

Japanese collectivism is rooted in family relations described with the term '*amae*'. This noun originates from the verb '*amaeru*' that means "to depend and presume upon another's benevolence" (Doi 1956). This social interdependence gave a ground to mark out the *tacit* knowledge (Michael Polanyi's term) as the most vital for industrial relations in Japan. The other type of knowledge – *explicit* or the "Cartesian" one is in turn distinctive for the Western societies (Yasumiro, Westney 2001: 177). One must admit anyway, that these are not the "pure types" but the general dominant tendencies.

However, namely the tacit knowledge comprises the core of the '*front-line management*' concept in the Japanese case. The latter implies that "the workplace is recognized and valued as the center of knowledge creation and in which knowledge-creation resources and processes are concentrated at the front line of the company" (ibid: 178). This dense communication through self-transgression is possible due to the respective surrounding. The latter concept called '*ba*' (roughly – 'place') serves as "a platform where the knowledge is created, shared and exploited" (Nonaka et al. 2001: 19). It also explains the pertinence of horizontal hierarchies located at the crossing of micro- and institutional levels at Japanese enterprises.

2. The economic line of argumentation is carried in accordance with *regulation approach*. Its choice for the analysis of Japanese political economy is determined by the capacity of this theory to investigate into specific relations between labor and capital. Since they exceed for example the normative (for the Western economy of mass production) Fordist regime of accumulation and don't fit into Keynesian regulatory policies, there exists a need to explore these social patterns in a detail (Boyer, Yamada 2002). In addition, the regulation approach seeks to establish a connection between a labor-capital nexus and a respective monetary regime. Thereby, it enables us to adequately assess socio-economic phenomena (enterprise ethics), as well as to account for some classical and Marxian explanations that stress respectively upon the rationality of market and the tendency to extract additional surplus value.

Accordingly, the regulation theory offers to look at the 1990s recession from the two standpoints: the crisis as an exogenous shock that was brought about by the international monetary regime, and, second, crisis as an inherent structural pattern (rooted within social organization), that in spite of being perceived, could not be institutionally handled (Boyer, Yamada 2002: 9). Consequently, the question of structural mechanisms for crisis overcoming nowadays is central to the current research.

Results

The globalization tendencies going in line with neo-liberal transformations are almost inevitable for highly industrialized, service-oriented economies like the Japanese. Therefore, current anti-deflationary actions in frames of Abenomics seem

to be justified. Loose monetary conditions as well as expansionary fiscal policy for business can contribute to the corporations' international competitiveness and thus drag the Japanese economy out of crisis. However, the government must not neglect micro-dimension. The 1990s crisis showed that beggar-thy-neighbor policy at the expense of the local working force cannot sustain economic development in the long-run perspective. Moreover, micro-recourses – households' savings – provided crucial support for governmental investment in times of the biggest hardships for the Japanese economy.

The main conclusion is that the safety networks composed by horizontal hierarchies mainly at the institutional level are unique to Japan according to the degree of their entrenchment. Being the driving force of Japanese industrial development during the second half of the XX century they will definitely come useful at the post-industrial stage.

References

Abegglen, James C. (1979, c1958): *The Japanese factory*. New York: Arno Press (Perennial works in sociology).

Ashkanasy, Neal; Gupta, Vipin; Mayfield, Melinda; Trevor-Roberts, Edwin (2004): *Future orientation / House, Robert J.: Culture, leadership, and organizations. The GLOBE study of 62 societies*. Thousand Oaks, Calif: Sage Publications.

Befu, Harumi (2001): *Hegemony of homogeneity. An anthropological analysis of "Nihonjinron"*. Melbourne, Portland, Or: Trans Pacific Press; Distributed in North America by International Specialized Book Services (Japanese society series).

Boyer, R.; Yamada, T. (2002): *Introduction. A puzzle for economic theories / Japanese Capitalism in Crisis: A Regulationist Interpretation*. Taylor & Francis.

Doi, L. Takeo (1956): *Japanese Language as an Expression of Japanese Psychology*. *Western Speech*, 20: 90-96.

Hamaguchi, Eshun (1996): *The Contextual Model in Japanese Studies / Japanese culture and society: models of interpretation*. Deutsches Institut für Japanstudien, München

Itoh, Makoto (2000): *The Japanese Economy Reconsidered*. Palgrave, New-York

Nonaka, Ikujiro; Konno, Noboru and Toyama, Ryoko (2001): *Emergence of "Ba": A Conceptual Framework for the Continuous and Self-transcending Process of Knowledge Creation / Nonaka, Ikujiro; Nishiguchi, Toshihiro: Knowledge emergence. Social, technical, and evolutionary dimensions of knowledge creation*. Oxford, New York: Oxford University Press.

Yamada, Toshio (2002): *Japanese Capitalism and the Companyist Compromise / Boyer, R.; Yamada, T.: Japanese Capitalism in Crisis: A Regulationist Interpretation*. Taylor & Francis.

Yasumuro, Kenichi; Westney, D. Eleanor (2001): *Knowledge Creation and the Internationalization of Japanese Companies: Front-Line Management Across Borders / Nonaka, Ikujiro; Nishiguchi, Toshihiro: Knowledge emergence. Social, technical, and evolutionary dimensions of knowledge creation*. Oxford, New York: Oxford University Press.

Patil, Vikram S.¹: What Determines an Access to Compensation Claim? An Analysis of Farmers' Decision in India

Abstract: *This paper gives an access based explanation of why farmers get marginalized due to development projects. The compensation of displaced farmers comprises of two methods: first method gives high initial compensation but has no scope for arbitration, whereas second method has low initial compensation but provides a scope for arbitration in future. Because the choice of award has a direct bearing on the ex-post welfare of the farmers, this paper is an enquiry into what determines their compensation choice. Using a binary response model on a primary dataset of over 200 displaced farmers from Upper Krishna Irrigation Project in Northern Karnataka, India, we try to validate access based hypotheses in choice of award. Access based theories of property rights distribution suggest that in addition to property rights, benefits from any resource actually depend on access mechanisms i.e. the bundle of powers actors have. We show that the choice is governed by the political bargaining power and availability of information and those farmers lacking these end up being further marginalized.*

Introduction

In most of the countries, regulatory control over property rights of privately owned land rests in the hands of the government (Miceli and Segerson, 2000, Bell and Parchomovsky, 2001, Doremus, 2003, Lueck and Miceli, 2004, Jacobs, 2006). The government either gives or takes away the land property rights of the owners depending upon the contemporary situation (Bromley, 1991). This shift in property rights of land for development projects has many negative implications on landowners especially in developing countries. As a result, impoverishment and marginalization is common in large scale displacement in development projects especially dams and irrigation projects (Terminski, 2013). This is because displacement causes disruptions in socio-cultural, economic and physical aspects of the people who displace in the development projects. Indeed, governments of respective areas are obliged to compensate and rehabilitate affected people as per the provisions of eminent domain or involuntary policies. The main aim or an intended outcome of compensation and rehabilitation is to improve or at least regain income and standard of living of displaced people (Cernea, 2003). However, many literatures argue that, despite compensation provisions, affected people end up worse off and impoverished after displacement (Fischel and Shapiro, 1989, Cernea, 1998, Cernea, 2003).

Upper Krishna Irrigation Project (UKP) is one such development project, which is being implemented in the Krishna river region in the state of Karnataka, India. UKP is a multipurpose project with the main objectives of generating electricity² and irrigating 833,600 hectares in four drought prone districts of Northern Karnataka (GoI, 2010)³. For this project to complete, the government has acquired close to

¹ vikram.patil.1@agrar.hu-berlin.de, vickyagrigo@gmail.com, Division of Resource Economics, Humboldt University, Berlin, Germany

² Around 150 MW of electricity is to be generated from this project.

³ The four districts are: Bagalkot, Bijapur, Raichur and Gulbarga.

144,040 hectares of land, which affects nearly a population of 450,000 (GoK, 2006, GoI, 2010). In order to distribute the aggregate benefits of the shift in property rights of the farmers, the government has formed two alternative compensation-claiming mechanisms. The first is called as Consent Award (CA) where farmers are compensated as per the market rate but in exchange, they have to forgo their rights for further higher claims through arbitration. The second is called General Award (GA) where initial compensation is lower than the CA but farmers have the right to approach the court for claim higher compensation. The individual farmers are free to opt for either of the compensation mechanisms explained above. Yet, we observe that majority of the farmers so far claimed the compensation through the CA in spite of the fact that there is an incentive to get higher compensation through the GA.

Aim of the Project

The aim of this study to examine what determines displaced farmers' choice of compensation-claiming mechanisms and to understand why majority of the farmers claim their compensation through the CA in spite of having higher incentive through the GA. Access based theories of property rights distribution suggest that in addition to property rights, benefits from any resource actually depend on access mechanisms i.e. the bundle of powers actors have. We show that the choice is governed by the political bargaining power and availability of information and those farmers lacking these end up being further marginalized.

Bromley (1991) defines property as a social relation, and not a physical object, that links the property holder to something of value (a benefit stream) which the state agrees to protect. In addition, he defines right as a capacity or claim against something. Thus, "property right is a claim to a benefit stream that the state agrees to protect by assigning the duty to others" (*ibid.*; p.2). With this definition, the contemporary compensation distribution mechanisms in the UKP can be defined as farmers' compensation-claiming rights (CA and GA). The literature on property rights has dealt with distribution of property rights and property regimes for efficient resource allocation and use (Libecap, 1986, Libecap, 1989, Schlager and Ostrom, 1992, Libecap, 1993, Cole, 2010). However, the right holders sometimes may not be able to use particular resource for intended benefit stream even after they are assigned property rights. For instance, farmers may have land rights but may not be able to achieve the benefits without access to labor or capital (Ribot and Peluso, 2003). The influence of other *access* mechanisms in achieving an intended outcome is thus unaddressed in property rights literatures. We argue that, in some situations, additional mechanisms are required other than property rights alone to attain an intended outcome. In this regard, *access* theory gives a theoretical framework to understand the variables influencing the intended outcome.

In order to address the question of who has benefited from either one of the compensation claim mechanisms and how, the study uses access based theory of property rights distribution. In contrast to property as the right to benefit from things, Ribot and Peluso (2003) define access as "the *ability* to derive benefits from things". Indeed, property rights are *de jure* when those rights are lawful or legal by government and are *de facto* when they form among resource users (Schlager and Ostrom, 1992). However, rights as the formal institutional arrangements are one of the factors to access and use of resources (Mearns and Binns, 1995). Whereas,

compared to the *de jure* property rights, access is a broad concept which includes both “*de jure* and *de facto* or extra-legal” (Ribot, 1998). *Access* puts property rights as one set of mechanisms under broad range of institutions, social and political relations, and discursive strategies that influence the benefit stream (Ribot and Peluso, 2003). Ribot and Peluso (2003) thus argue that *access* are more akin to a “bundle of power” than to a “bundle of rights.” In addition to *right based access* mechanisms, the *structural and relational* factors play a relevant role in shaping the benefits derived from the resource (*ibid.*). These factors include technology, capital, markets, labor, knowledge, authority, identities, and social relations. Inequalities in these access mechanisms make some farmers deprived from getting compensation through the GA, which causes unequal distribution of benefits from the resources.

Hypotheses and Methodology

Based on the theoretical perspective described in above section, we hypothesize that only those farmers having *access* mechanisms are able to choose the GA and get higher compensation. We identified the *access* mechanisms that may influence the farmers’ decision in choosing the compensation claim. Those mechanisms are total land holding before submergence (*LAND*), prior information about CA/GA (1 if Yes; 0 otherwise) (*INFORM*), awareness about CA and GA (1 if yes otherwise 0) (*AWRNS*), access to social identity (membership in any government or cooperative body, political party or any other organizations) (*MEMBR*) (0= No membership, 1= Member of federation/co-operative, 2= member of political party/panchayat), and third party influence (*INF_TP*) (0= No influence, 1= Lawyers, 2= Government officials, 3 = Leaders 4 = Relatives and friends). Demographic features like age, education, occupation, family type and family size and percent of land holding submerged are also considered in the model as control variables.

A primary data of over 200 displaced farmers is collected in 7 randomly selected submerged villages of Upper Krishna Irrigation Project in Northern Karnataka, India. Access based theories of property rights distribution suggest that in addition to property rights, benefits from any resource actually depend on access mechanisms i.e. the bundle of powers actors have. We testify the hypothesis using dichotomous choice model to analyze the primary data collected from a survey of displaced farmers. We show that the choice is governed by the political bargaining power and availability of information and those farmers lacking these end up being further marginalized. These results help us better understand whether the factors around which *access* based mechanisms have been built play an important role in choosing either of the claim mechanisms, which have direct bearing on displaced farmers’ marginalization.

Results

We ran different probit models to overcome the problems of estimation and data and to come with appropriate results showing the likelihood of choosing the general award. The results indicate that the variables *LAND*, *AWRNS*, *MEMBR* and *INF_TP* have significantly influenced the likelihood of claiming the compensation through the GA, thus validating the hypotheses. Because land holding (*LAND*) is an indicator of wealth for farmers, which implies the risk bearing ability as the GA

involves time (ranges from two to 15 years¹) to claim compensation. Awareness about the CA and the GA (AWRNS) implies that the farmers have information about the procedure, cost and time required in each award. Hence, information plays an important role in their decision. Social identity (MEMBR) through which one has the network within a society with key actors like other leaders, lawyers and government officials. This is also an important factor in choosing the awards. All the three variables together validate our hypothesis that those farmers having access mechanisms, other than the legal claiming mechanisms, are able to choose the GA and get higher compensation. Hence, legal rights alone are not sufficient to attain intended outcome of efficient rehabilitation of the displaced farmers. This implies that the compensation-claim rights, especially the GA, are not sufficient to ensure benefit of higher compensation. In order to claim compensation through the GA, farmers have to have either of these access mechanisms, without which the GA is inaccessible to those farmers. Hence, in addition to legal/formal claim mechanisms, political bargaining power and information are inevitable to gain the benefit of the GA. This insufficiency of legal rights and a wide disparity in terms of political bargaining power and information between the people of displaced villages led to compensation distributional inequalities and as a result further marginalization.

References

- BELL, A. & PARCHOMOVSKY, G. 2001. Takings reassessed. *Va. L. Rev.*, 87, 277.
- BROMLEY, D. W. 1991. *Environment and economy: Property rights and public policy*, Basil Blackwell Ltd.
- CERNEA, M. M. 1998. Impoverishment or Social Justice? A Model for Planning Resettlement. *Oxford, New Delhi*.
- CERNEA, M. M. 2003. For a new economics of resettlement: A sociological critique of the compensation principle. *International Social Science Journal*, 55, 37-45.
- COLE, D. H. 2010. 1910 New Forms of Private Property: Property Rights in Environmental Goods. *Property law and economics*, 5, 225.
- COMMISSIONER & SECRETARY, E. 2006. Karnataka - Upper Krishna Project III: Economic Rehabilitation of Project Affected Population. In: REVENUE DEPARTMENT, U. (ed.). Navanagar, Bagalkot: government of Karnataka.
- DOREMUS, H. 2003. Takings and Transitions. *J. Land Use & Envtl. L.*, 19, 1.
- FISCHEL, W. A. & SHAPIRO, P. 1989. A constitutional choice model of compensation for takings. *International Review of Law and Economics*, 9, 115-128.
- JACOBS, H. M. 2006. *The "taking" of Europe, Globalizing the American Ideal of Private Property?*, Lincoln Institute of Land Policy.
- LIBECAP, G. D. 1986. Property rights in economic history: Implications for research. *Explorations in Economic History*, 23, 227-252.
- LIBECAP, G. D. 1989. Distributional issues in contracting for property rights. *Journal of Institutional and Theoretical Economics (JITE)/Zeitschrift für die gesamte Staatswissenschaft*, 6-24.
- LIBECAP, G. D. 1993. *Contracting for Property Rights*, Cambridge university press.

¹ Taken from our sample data

LUECK, D. & MICELI, T. J. 2004. Property law. *Economics Working Papers*, 200404.

MEARNS, R. & BINNS, T. 1995. Institutions and natural resource management: access to and control over woodfuel in East Africa. *People and environment in Africa*, 103-114.

MICELI, T. J. & SEGERSON, K. 2000. Takings. *Encyclopedia of Law and Economics*, 4, 328-357.

RIBOT, J. C. 1998. Theorizing Access: Forest Profits along Senegal's Charcoal Commodity Chain. *Development and Change*, 29, 307-341.

RIBOT, J. C. & PELUSO, N. L. 2003. A Theory of Access*. *Rural sociology*, 68, 153-181.

SCHLAGER, E. & OSTROM, E. 1992. Property-Rights Regimes and Natural Resources: A Conceptual Analysis. *Land Economics*, 68, 249-262.

TERMINSKI, B. 2013. *Development-Induced Displacement and Resettlement: Theoretical Frameworks and Current Challenges*, Geneva, Switzerland, University of Geneva.

TRIBUNAL, K. W. D. 2010. The Report of the Krishna Water Disputes Tribunal with the Decision *In: INDIA, S. C. O. (ed.)*. New Delhi.

Ryzhkova, Marina¹: Market Price Bubble and Its Impact on Subjective Well-being

Abstract: *Market bubble means a trade in high volumes at prices that considerably exceed true values (or intrinsic values). The primary aim of the study was to design a market model and find and analyze the conditions under which bubbles would appear. Another aim was more in didactic field. We held some classroom games to help students to get some insight in market trade mechanisms. Four games were held: two with female, two with male participants. The next four hypotheses were tested: H1. Risk attitude determines amount of money which students have at the game's end (partly proved). H2. Average risk attitude among students and size of price bubble have direct correlation (not proved). H3. Girls have less risk attitude (proved). H4. Price anchor favours a price bubble (partly proved). The consideration of interconnection between subjective well-being and market bubbles is planned at the Summer School.*

Introduction

There are different convertible terms for the same market process: economic bubble, speculative bubble, market bubble, price bubble, financial bubble, speculative mania, balloon etc. The process itself means a trade in high volumes at prices that considerably exceed true values (or intrinsic values). Scientists suggest many explanations. Surprisingly bubbles emerge even without uncertainty, speculation or bounded rationality [1, 2]. The main reason remains: it is often difficult to observe intrinsic values in modeled laboratory market let alone real-life markets.

Aim of the Project

The primary aim was to design a market model and find and analyze the conditions under which bubbles would appear.

Another aim was more in didactic field. Economics is often taught at a level of abstraction that can hinder some students from gaining basic intuition. Experiments and other economic games are used more often. We held some classroom games to help students to get some practical skills in a market.

Hypotheses and Methodology

During the research 4 games were conducted: two of them with female, another two with male respondents. As a basis for research the paper of Sheryl B. Ball and Charles A. Holt "Classroom Games: Speculation and Bubbles in an Asset Market"[3] was used.

Games were held as oral double auction, where each bid after the first must exceed the highest outstanding bid, and each ask after the first must be lower than the lowest outstanding offer.

In every game there were such limits as:
5-7 minutes for reading of instructions;

¹ marybox@inbox.ru, National Research Tomsk Polytechnic University, Tomsk, Russia

3 trial trading periods to explain students in more details what they must do; Real sessions consisted of 10 trading periods with the time limit of 2 minutes for each one, during which participants could do unlimited number of deals.

For every game we:

split group into 5 teams;

prepared 15 colored paper sheets to represent assets (3 assets for one team);

provided participants with some capital (2000 tokens) to finance trading.

At the end of every period a six-sided dice was thrown for every asset. If side “1” had fallen, an asset would be destroyed, otherwise it was saved and could be sold or bought in the next period.

For participants the main purpose of the game was to earn as much tokens as possible.

There was three ways for traders to earn tokens from assets:

1. Dividends (100 tokens), which are paid for every saved asset at the end of every period.

2. Profits from buying and selling assets.

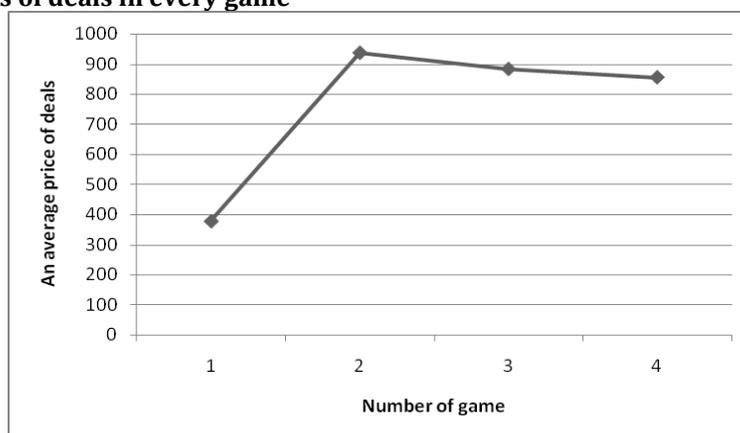
3. Any asset that still exists at the end of the 10th trading period was redeemed by price of 600 tokens.

The most challenging moment of the game was risk factor, which was determined by throwing of a dice for every asset at the end of periods. Risk attitude was measured by Shubert’s test.

Results

The result was an emergence of price bubble in 3 from 4 games.

Figure 1. Average prices of deals in every game



It happened that once there was no bubble because risk factor was too high to make decisions for deals, and students (girls) was afraid of deals or did them only at very low prices.

The next four hypotheses were tested:

H1. Risk attitude determines amount of money which students have at the game’s end.

H2. Average risk attitude among students and size of price bubble have direct correlation.

H3. Girls have less risk attitude.

H4. Price anchor favours a price bubble.

H1.

Table 1 Linear correlation between risk attitude and tokens at the end of experiment

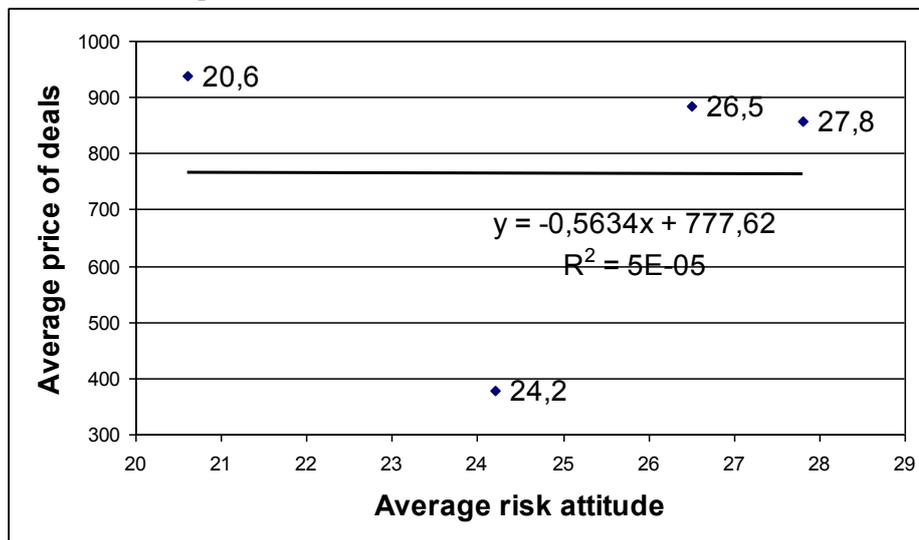
	All games	Game 1 (female, no anchor)	Game 2 (female, anchor)	Game 3 (male, no anchor)	Game 4 (male, anchor)
a ₀	4312,8	299,68	- 2317,5	11487	6629
a ₁	-38,76	129,35	253,28	-293,85	-116,87
R ²	0,0304	0,684	0,7434	0,7165	0,5852
Average risk attitude	32	30	27	34	36

$$\text{MONEY} = a_1 \cdot \text{RISK} + a_0$$

RESULT: There is no sense in general correlation between risk attitude and tokens. But female results demonstrate rather strong direct relation while male results have inverse negative relationship.

H2.

Figure 2. Dependence between prices of deals and risk attitude



RESULT: In our experiments H2 did not proved (picture 2). There is also no dependence between maximum personal risk attitude and average price ($R^2 = 0,0267$) and between maximum personal risk attitude and maximum price in the game ($R^2 = 0,1629$). We suspect that the reason was a lack of Shubert's test to correctly identify risk attitude. Analyzing the activity during experiments on the videotape we find people behave different (not like the test predicts). *I am going to discuss it at the Summer School.*

H3.

RESULT: According to table 1 this hypotheses proved.

H4.

Price anchor means that we set an example of prices of bids and asks in instructions during the auction. We had two types of instructions:

1. We give an example of initial prices of asks and bids, and if someone didn't know what should be the initial bid or ask price, it was typically that he/she made references to an example in the instruction.

<i>Bid</i>		<i>Ask</i>	
<i>Team</i>	<i>Price</i>	<i>Team</i>	<i>Price</i>
A	758	B	981
C	759	D	979

2. There was no example of prices.

<i>Bid</i>		<i>Ask</i>	
<i>Team</i>	<i>Price</i>	<i>Team</i>	<i>Price</i>
A	***	B	***
C	***	D	***

RESULT: The hypotheses has partly proved (table 2). For females anchor contribute to price bubble while for males it is not obvious.

Table 2 Games and price bubbles

	Game 1 (female, no anchor)	Game 3 (male, no anchor)	Game 2 (female, anchor)	Game 4 (male, anchor)
Average price of deals	377,5	883,75	937,4	856
Maximum price of deals	650	1500	1800	870

During the game every student has his/her own strategy, which was determined by his/her logic, psychology, mood, etc. We distinguished such tendencies as:

1. At the beginning they tried to earn money via profits from buying and selling assets (1-6 periods).
2. Some students sold all assets by 6th period and didn't buy any more because of fear of risk to lose assets and money.
3. To the end of the games number of deals decreased because assets were being destroyed or a price of bid was less 600 tokens (amount of tokens which was given for every saved asset after 10th period).
4. There were some outstanding people which were very active, and didn't want to stop selling/buying assets even at the end of game. The result of their profit depended on fortune of destroying/saving assets.

In general hypothesis was proved statistically poor. The reasons are:
small sample;

influence of individual features on game results;

imperfection of Shubert's test to identify risk attitude;

possibility of subsidy by one student for another (student with a big risk attitude agreed to do unprofitable deal because of losing tokens);

possibility of earning tokens by some students because of misunderstanding of game rules by others.

My further investigation will be connected with

measurements of subjective well-being;

improving the methods of risk attitude estimates;

impact of subjective well-being on participation in market bubbles;

estimation of the magnitude of changes in subjective well-being due to market bubbles.

These are the topics I want to discuss during the Summer School.

References

Smith, V.; Suchanek, G.; Williams, A. "Bubbles, Crashes, and Endogenous Expectations in Experimental Spot Asset Markets". *Econometrica* 56 (5) (1988): 1119-51.

Lei, V.; Noussair, C.; Plott, C. (2001). "Nonspeculative Bubbles in Experimental Asset Markets: Lack of Common Knowledge of Rationality Vs. Actual Irrationality". *Econometrica* 69 (4): 831-59.

Ball, S. and Holt, C. "Classroom Games: Speculation and Bubbles in an Asset Market". *The Journal of Economic Perspectives*, 12 (Winter, 1998): 207-18.

Kahneman, D. and Tversky, A. "Choices, values, and frames". *American Psychologist*, 39(4), (Apr 1984): 341-50.

Kahneman, D. "Reference points, anchors, norms, and mixed feelings". *Organizational Behavior and Human Decision Processes*, 51(March1992): 296-312.

Shunda, N. "Auctions with a Buy Price: The Case of Reference-Dependent Preferences". *Working papers University of Connecticut, Department of Economics* No. 2007-42. Oct 2007. 37 p.

Dodonova, A. "An experimental test of anchoring effect". *Applied Economics Letters*. 16 (Jul 2009): 677-8.

Kragt, M. and Bennett, J. Designing Choice Experiments to Test for Anchoring and Framing Effects. *Environmental Economics Research Hub Research Reports*. No. 0810. Dec 2008.

Sakaeva, Maria¹: Informal Practices in Russian Legislative Bodies: How Entrepreneurs Avoid the Rules for All and Protect their Property Rights

Abstract: PhD project is focused on how entrepreneurs owning deputy status within regional and municipal parliaments avoid rules for all and achieve their business interests. The present research is based on two cases: Saint-Petersburg parliament (9 interviews, 2009 year) and Komi Republic regional parliament (17 interviews, 2013-2014 years). Theoretical framework - property rights theory and credible commitment concept. The main hypothesis is: parliament membership let economic agents to get considerable preferences and benefits for their firms and enterprises, but economic capital is far not the only one, they are interested in. I called deputy status as “the window of opportunities”. The first one group of opportunities is avoiding the rules for all and protecting property rights. Entrepreneurs with deputy status can: 1) easily contact to officials and politicians in order to get information, decisions, privileges, etc.; 2) pay less fines, rare experience inspections and violence from government regulations agents; 3) stay out of corruption practices. The second one group is achieving economic interests: 1) access to municipal and regional budget; 2) low taxes and penalties; 3) municipal contracts on building, providing services for the city or region. The crucial rule for those, who wants to get into the “window” - exchange loyalty for benefits. Deputy should be loyal to the leader political party, city or regional manager (gubernator). Political leaders are the patrons and entrepreneurs with deputy status are their clients. Exchange between them is based on social capital and trust.

Introduction

Private owners used to influence politics and political process since the moment institutions of private ownership and market had appeared. However, period of institutional influence forms is quite short: due to democratization and parliament development political bodies became open for citizens, who want to take part at law-creating process. In Russia election as direct and legal form of participation of business in political process has replaced long period of ‘dark’ politics, when owners used to practice informal methods of influence politics and its players (Barsukova 2006).

Empirically fixed the fact, that regional legislative bodies, elected in 2000-2007 in Russia, are packed by entrepreneurs (Pappe 2005; Romanova 2006; Sakaeva 2012). Compared to the 1990s the particular tendency is obvious – increasing political participation of business actors. That phenomenon is not well-investigated. This paper is about motivation, entrepreneurs electing to parliaments have. Also I will try to answer the question about preferences and opportunities they have. I found out that entrepreneurs are interested in deputy status under two conditions: high risks of business activity, low level protection of private property.

¹ eu.sakaeva@gmail.com. Department of Economic Sociology, National Research University Higher School of Economics, Moscow, Russia

The main hypothesis is: parliament membership let economic agents to get considerable preferences and benefits for their firms and enterprises, but economic capital is far not the only one, they are interested in. There are two main propositions. How the institutional environment, formal and informal rules and norms of business activity, influences the behavior of economic agents. Another word, to what extent being entrepreneur is risky and who threaten property rights in Russia. The second one question is about benefits and costs, which an entrepreneur with deputy status, as a market player, gets and incurs.

Theoretical Framework and Concepts

Theoretical framework includes theory of property rights, credible commitment concept and theory of grabbing state hand. While the research is about relations between property owners and different actors – state officials, market players and politicians - *property rights* are understood as a field of interaction between economic and state agents. Such definition is enrooted in political economy (Weimer 1997; North 1993; Demsetz 1967).

For the sake of social welfare and economic growth, property rights should be based on *credible commitment*. For my research the following concept is the most appropriate: laws and constitutions are not enough for property protection. Individuals and groups under the curtain circumstances can use institutions for their particular interests or privatize institutions. As a result, credible commitment is under the risk (Riker and Sened 1991; Jacobs 2005; Frye 2004).

I have done economic-sociological analysis of the movement from economic to politics. Economic sociologists look at market relations as social relations. It is well-known, that low level of social trust weaken contracts, agreements and commitment (Bardhan 2005; Frye 2004; Portes 2003). Not each individual or group can violate property rights, but those, who have power and opportunities. State grabbing hand is a serious danger for owners, when state agents (mainly bureaucrats) have a freedom to violate a law. In the case of grabbing hand rules and norms are changed often by the state and manipulated by its agent (Frye 2004: 455-456). Grabbing hand causes corruption and state capture (Hellman and Kaufmann 2000; Acemoglu 2003). Researchers of capitalist development in Latin America (Haber, Maurer and Razo 2002; Krueger 2002; Tornell 2002) and South-East Asia (Kang 2002) concluded, that in the absence of rule of law and strong institutional protection investments to economy occur. Economic development is based on specific form of capitalism – *cronyism*. State governors and large owners made an agreement, when the state guarantees property rights for particular owner for the political loyalty in advance.

Data and Methods

Studying at European University in Saint-Petersburg I made my master paper in 2008/2009 on a case of Saint-Petersburg parliament. There were two questions – 1) how many entrepreneurs are in regional parliament and 2) why they become deputies, what opportunities and costs get after that. Firstly, I tried to evident that movement from business to politics is obvious. That's why collected the following data - how many businessmen and members of firms and companies were elected into regional parliaments.

I chose electoral cycle 2003-2007 and collected data about the number of entrepreneurs within regional parliaments in North-West Federal Okrug (see results Appendix 1). Research is based on two cases Saint-Petersburg and Komi Republic. The main research method – interview with present and ex-members of regional and municipal parliament, also with entrepreneurs familiar to my research field. I was making them in Saint-Petersburg (9 in 2009) and in Syktyvkar, capital city of Komi Republic (17 in 2013-2014). Results on Saint-Petersburg case were published (Sakaeva 2012).

Results

Parliament as 'Window of Opportunities': Benefits and Costs for Business Owners Avoiding the Rules For All

Businessmen with deputy status have many opportunities to avoid rules for all. Firstly, they can easily contact to official and politicians, they need in their economic activity. Becoming deputy, he becomes the member of political group rather than economic.

Deputies, due to political status and resources produced by it, can be excluded from the sphere of activity of state control bodies. Such businessmen rare than others pay fines, experience inspections and violated pressure from 'siloviki' and other 'grabbers' rare than others pay fines. Businessmen with political status have much more social capital – networks and relations with powerful persons.

Benefits have financial nature also. Deputies have privileged access to municipal and regional budget. Russian experts found out that relationship between local business and city authorities is based on principle 'taxes +'. City authorities require from local business not only paying taxes, but also financing different social, public and cultural projects. (Oleynik 2008). Entrepreneurs with deputy mandate are not excluded from the system; however they can choose – pay or not pay. Payments for him are investments to reputation and future benefits.

Exchange loyalty for benefits

Exchange as a form of relations between business and power fixed T. Frye (Frye 2002). How does exchange on municipal and regional levels look like? I should start with social capital. This form of capital, according to my two cases, is the most important form of capital. Each deputy tries to maximize it. Regular contacts and informal ties produce economic preferences. In some cases trust between patron (state official) and client (property owner) is enough. Another words, private owner quit often does not have strong obligation to pay off for benefits.

In Russia municipal and regional politics and economic development also is characterized by high concentration of power and authorities in hands of city manager or governor. Good relations with them are significant. On the other hand, it is easier for city manager or governor to enforce private owner to vote for decision. For my respondents this system is logical and balanced.

Two kinds of factors motivate entrepreneurs to play within political field. Unpredictable and bad-working institutional environment reduces credible commitment and property right protection. Parliament membership lets to protect business. Weak institutions and short distance between politics and business open 'window' and 'doors', which are profitable for economic agents. Those, who are close to power, have many reasons to support and develop weak institutional system.

References

Bardhan, Pranab 2005. Scarcity, Conflicts and Cooperation: Essays in the Political and Institutional Economics of Development. The Mitt Press.

Barsukova, Svetlana 2006. Srachivanie Tenevoy Ekonomiky i Tenevoy Politiky. Mir Rossii. Vol. 15, № 3, 158-179.

Demsetz, Harold 1967. Toward a Theory of Property Rights. The American Economic Review, Vol. 57, No 2, 347-359.

Frye, Timothy 2002. Capture or Exchange? Business Lobbying in Russia. Europe-Asia Studies, 54 (7), 1017-1036.

Frye, Timothy 2004. Credible Commitment and Property Rights: Evidence from Russia. The American Political Science Review, 98, 453-466.

Haber, Stephen 2002 (ed.). Crony Capitalism and Economic Growth in Latin America: Theory and Evidence. Hoover Institution Press.

Haber, Stephen & Noel Maurer & Armando Razo 2002. Sustaining Economic Performance under Political Instability: Political Integration in Revolutionary Mexico, in: S. Haber (ed.). Crony Capitalism and Economic Growth in Latin America: Theory and Evidence. Hoover Institution Press, 25-75.

Hellman, Joel & Jones Geraint & Daniel Kaufmann 2000. Seize the State, Seize the Day: An Empirical Analysis of State Capture and Corruption in Transition Economies. Research Working Paper 2444. World Bank, Washington, DC.

Jacobs, Alan 2005. A Matter of Trust: Cognition, Institutions and the Sources of Credible Commitment. Research Working Paper. Retrieved <http://faculty.arts.ubc.ca/jacobs/jacobs%20Matter%20of%20Trust%20APSA.pdf>

Kang, David 2002. Crony Capitalism. Corruption and Development in South Korea and Philippines. Cambridge University Press.

Krueger, Anne 2002. Why Crony Capitalism is Bad for Economic Growth? In: S. Haber (ed.). Crony Capitalism and Economic Growth in Latin America: Theory and Evidence. Hoover Institution Press, 1-25.

North, Douglass 1993. Institutions and Credible Commitment. Journal of Institutional and Theoretical Economics, 149, 11-23.

Oleynik, Anton 2008. Rynok kak Mehanizm Vosproizvodstva Vlasti. Pro et Contra, 12, 88-107.

Portes, Alejandro 2003. Neformal'naya Economica i ee paradoksy. Economicheskaya Sociologia, Vol. 4, № 5, 34-54.

Sakaeva, Maria 2012. Palament kak Okno Vozmoznostey: Issledovanie Povedenia Predprinimateley s Deputatskim Mandatom v Hode realizacii Rinochnih Interesov. Economicheskaya Sociologia, Vol. 13, № 3, 96-122.

Tornell, Aaron 2002. Economic Crisis and Reform in Mexico. In: S. Haber (ed.). Crony Capitalism and Economic Growth in Latin America: Theory and Evidence. Hoover Institution Press, 127-150.

Volkov, Vadim 2012. Silovoe Predprinimatel'stvo XXI vek: Economico-Sociologicheskij Analiz. Saint-Petersburg, European University Publisher.

Pappe, Yakov 2005. Otnosheniya federalnoy ekonomicheskoy elity I vlasti v Rossii v 2000-2004 godah: tormozenie v zentre i novie strategii na mestah. In: Regionalnie Elity v Sovremennoy Rossii. Ed. By Fruhtmann. Moscow: Liberal'naya Missia.

Riker, William & Itai Sened 1991. A Political Theory of the Origin of Property Rights: Airport Slots. American Journal of Political Science, 35, 953-973.

Romanova, Ludmila 2006. Revoluzia upravlaushih. Smart Money, 34.

Weimer, David 1997 (ed.). The Political Economy of Property Rights. Institutional Change and Credibility in the Reforms of Centrally Planned Economics. Cambridge University Press.

Appendix 1

Region	Number of deputies	Business %	Large business %	Insiders %	Outsiders %	Small business %					
Vologda region	34	21	61,8	16	76	10	62,5	6 (3)	37,5	5	24
Komi Republic	30	17	56,7	11	64,7	3	27	8 (5)	73	6	35,3
Kaliningrad region	40	22	55	8	36,4	6	75	2 (0)	25	14	63,6
Archangelsk region	62	33	53,2	21	63,6	11	52,4	10	47,6	12	36,4
Pskov region	44	23	52,3	13	56,5	10	77	3	23	10	43,5
Leningrad region	50	25	50	20	80	9	45	11	55	5	20
Murmansk region	32	15	46,9	12	80	6	50	6 (5)	50	3	20
Novgorod region	26	12	46,2	10	83	7	70	3 (1)	30	2	17
Karelia republic	50	23	46	16	70	7	56	9	44	7	30
Saint-Petersburg	50	20	40	8	40	7	88	1	12	12	60
Nenets autonomy okrug	20	5	25	5	100	2	40	3	60	0	0
Total			50,3		67,8		55,7		44,3		32,2

* Insiders – regional and municipal firms and companies. Outsiders – federal and foreign companies, which work in a region.

Shakina, Elena¹, Yudkevich, Maria²: Remunerative Incentives and Commitment in Academic Contract: Empirical Evidences from NRU HSE

Abstract: *This study aims at finding out the impact of the remunerative and commitment-based incentives on the academic outcomes of the HSE faculty. This analysis is relevant as provides an understanding about the efficiency of the motivation of HSE academic contract. At the moment a number of academic development tools are introduced at HSE. This research implies the program of individual research grants as a key driver of remunerative and commitment-based incentives for academic staff. We expect to reveal the treatment effect of this program on the publication intensity and quality in HSE. If this effect is found out we will state that remunerative and commitment-based incentives play critical role for research activities and their outcomes in HSE. The empirical analysis is carried out for the purpose of this research. The database comprises about 800 observations of the granted and rejected applications from 2008 till 2012. This database is elaborated on the information provided by the HSE Academic Fund and publicly available data obtained from HSE website. The technique of regression discontinuity design enables estimation of the treatment effect of the individual research grants over last 5 years. As a result of this investigation we expect to shed some light on the results of the HSE motivation policy towards academic staff.*

Introduction

Faculty motivation for research and investment in human capital are key factors for university success and at the same time the great puzzle. Academic contract, being incomplete in nature, may assure incentives for high-quality research in some circumstances and create distorted incentives for moonlighting and academic cheating in others. In our paper we explore an impact of research grant program on short-term and long-term changes in research productivity of faculty.

This study focuses on the exploration of incentives implicitly and explicitly introduced in the design of research grants. The research question addresses remunerative and commitment-based incentives. We investigate whether the granting of the faculty members generates these incentives. In this study we seek to find the empirical evidence in the framework of incentive theory of motivation, particularly self-determination theory (Lepper et al, 1973; Deci and Ryan, 1985), in academic contracts.

Staying in line with Miller et al. (2013), Grimpe (2012), Auranena and Nieminen (2010) we suppose that faculty tend to outperform if they win the competition and are rewarded by a research grant. However, such a change in research productivity may be a temporary one or have a longer effect. We argue that

¹ eshakina@hse.ru, National Research University Higher School of Economics, Moscow, Russia

² National Research University Higher School of Economics, Moscow, Russia

is may depend both on individual human capital and design of research support in the system in general.

We use data of research grant program at National Research University Higher School of Economics (NRU HSE) which is a leading Russian university in social sciences and has a long-lasting history of such grant support. HSE has several mechanisms of academic development for the faculty. The HSE academic contract aims at creating strong incentives for faculty development and promotion. It assumes relatively low basic salary with an opportunity to increase it by taking part in different competitive programs. The internal HSE research grants enable both remuneration for the grantees (which double their basic salary) and their commitment for the future academic outcomes. We test whether an average academic outcome (measured in publications of different types) of the granted academic staff exceeds average outcome of those who applied but didn't get the grant. This analysis enables us to see if the remunerative and commitment-based incentives are relevant for doing good research.

The program of internal research grants in HSE is designed as follows. The contest among all full-time teachers and researchers is annually conducted starting from 2003. Recent application campaigns have received about 150-200 research proposals from all research fields and campuses introduced in NRU HSE. All applications are reviewed and evaluated by the experts from the HSE Academic Fund. Each application gets a certain amount of points that equals the average of the evaluation of two experts. The threshold of each application campaign is established annually based on the distribution of the points, number of applications and the budget constraint. As a result about 30-40% best ones are usually announced as winners and receive financial support for 1 or 1.5 years. The expected outcomes of the individual research grants are publications in peer-reviewed journals. During recent years the emphasis has been put on the international journals indexed in Scopus and Web of Science.

Aim of the Project

Thus, ***the purpose of our study is to reveal the impact of the remunerative and commitment-based incentives on the academic outcomes in the contract with HSE faculty.***

This study focuses on the analysis of one of the key tools of the academic contract of NRU HSE, namely internal research grants of the HSE Academic Fund.

This internal mechanism of the contract aims at facilitating and supporting of the academic research of HSE. The choice of this program for our study is based on the idea to investigate true incentives of the academic staff to research. Similar issue has been explored in studies by Bloch (2014), Grimpe (2012). The internal grants of HSE enable both remuneration for the grantees and their commitment for the future academic outcomes. If our research would establish that the average academic outcome of the granted academic staff exceeds average outcome of those who applied but didn't get the grant, it would be proved that the remunerative and commitment-based incentives are relevant for doing research.

Hypotheses and Methodology

In order to answer the research question we design the model, underlining the important academic outcomes for the faculty members that won or failed in the competition to be granted. This model is tested on the longitudinal data set from 2003 until 2012. We base on the publicly available information about the applications of HSE faculty for the individual research grants as well as their academic achievements and merits.

Each case will be described by the set of variables that reflect:

- the amount of points put by the experts;
- the decision on the application (incl. the threshold of the current campaign);
- the academic outcomes during the year after the grant was given or rejected (like, number of publications in the Russian academic journals and number of publications in the international journals);
- the academic outcomes during the second year after the grant was given or rejected (like, number of publications in the Russian academic journals and number of publications in the international journals);
- the academic awards (like academic premium of the 2nd and 3rd levels);
- nested characteristics (like, research field, campus etc.)

The final dataset includes around 800 cases observed during 6 years (from 2008 to 2012) and around 10 variables that describe participation in the program and academic outcomes.

Our empirical strategy uses regression discontinuity design. This method represents a quasi-experiment and allows finding out the treatment effect of the program by revealing a statistically significant jump in academic outcomes of those who were granted. To correct for different research potential within these groups we consider borderline cases with people who were slightly above the threshold and got grant and with those who got slightly lower expert grades and were not awarded with grant. The technique of regression discontinuity design was used in the study of Benavente et al. (2012) for a similar research question. If this jump in the appropriate specification of the theoretical model is registered we draw a conclusion that the remunerative and commitment-based incentives play critical role for the research activities of HSE academic staff.

Expected Results

We expect to contribute to the theory of incentive academic contract. In order to answer the research question we design the model, underlining the important academic outcomes for the faculty members that won or failed in the competition to be granted. The model assumes that the grant allows faculty members redistributing of their time between research and all other activities. In the case of granting they can spend less time on making money on pure teaching or even outside university. That, in turn, allows getting extra rewards for publication productivity and creates extra opportunity to spend more time on research in the future. In sum, research grant works as an external force for an individual to move to another academic trajectory within university. Model shows that such a logic works for high-talented individuals only. For others, research grant implies just a short-time shock in research output.

This model is tested on the data of HSE to find the empirical evidence of the theoretical model and transmit the valuable experience of NRU HSE.

References

Benavente, J. M., Crespi, G., Figal Garone, L., & Maffioli, A. (2012). The impact of national research funds: A regression discontinuity approach to the Chilean FONDECYT. *Research Policy*, 41(8), 1461-1475.

Bloch, C., Sorensen, M. P., Graversen, E. K., Schneider, J. W., Schmidt, E. K., Aagaard, K., & Mejlgaard, N. (2014). Developing a methodology to assess the impact of research grant funding: A mixed methods approach. *Evaluation and Program Planning*, 43, 105-117.

Auranen, O., & Nieminen, M. (2010). University research funding and publication performance-An international comparison. *Research Policy*, 39(6), 822-834.

Grimpe, C. (2012). Extramural research grants and scientists' funding strategies: Beggars cannot be choosers? *Research Policy*, 41(8), 1448-1460.

Miller, K. A., Deci, E. L., & Ryan, R. M. (1988). Intrinsic Motivation and Self-Determination in Human Behavior. *Contemporary Sociology*.

Miller, J. C., Coble, K. H., & Lusk, J. L. (2013). Evaluating top faculty researchers and the incentives that motivate them. *Scientometrics*, 97(3), 519-533.

Lepper, M. R., Greene, D., & Nisbett, R. E. (1973). Undermining children's intrinsic interest with extrinsic reward: A test of the "overjustification" hypothesis. *Journal of Personality and Social Psychology*.

***Shestakov, Daniel*¹: Peasants, Rivers and Railroads: The Role of Human Capital Accumulation in Early Russian Economic Growth**

Abstract: *This paper estimates the link between education in Tsarist Russia and regional economic outcomes, using IV framework with rivers and railroad network taken as (weak) instruments. We try to establish the direction of causality between economic outcomes, measured as urbanization, with institutional factors, such as general public education, to re-address famous debate on whether institutions cause growth or vice versa. To address this question we employ 1897 census data as well as early statistical works on peasants' educational level. We find strong evidence that in the fin-de-siecle Russia institutions followed economic outcomes, not preceded them.*

Introduction

One of the long-standing debates in the theory of economic growth is between so-called 'institutional' and 'economic' approaches to the development, which may be summarized as whether good institutions such as property rights protection or freedom of speech are causes of good economic outcomes (Acemoglu et al 2014, Engerman and Sokoloff, 2000) or good economic outcomes allows nations to build good economic institutions (Glaeser et al., 2004, see overview of both positions in Acemoglu and Robinson, 2012). This papers aims to contribute to this ongoing debate with careful examination of early 20th century Russian history. Institution under examination is a universal public education, in which Russia famously lagged behind developed nations (Gerschenkron, 1962) despite the solid economic growth started in the late 19th century (Gregory, 1994). Three strands of literature will benefit from this work. First, above-mentioned institutions and development literature (Tabellini, 2010). Second, human capital literature, which emphasized importance of human capital accumulation on individual economic outcomes as well as on economic growth (Mankiw et al. 1992, Gennaioli et al., 2013). Finally, this paper contributed to the more recent 'history matters' approach, in which historical data is used to facilitate finding answers for economic puzzles (Crafts, 2012).

Aim of the Project

This projects aims to estimate cross-regional variation in educational outcomes of Nicholas II reforms (Saprykin 2009) on the economic characteristics of same regions, measured as urbanization rates, which is a standard approach among economic historians (Bairoch, 1993). To address endogeneity problem we will exploit data on natural means of communication, i.e. rivers, and railroad network, which are clearly correlated with education through better transportation of books and teachers, but arguably less correlated with economic outcomes (first due to being created by nature, second due Tsar's discretion which often had less economic calculation and more geopolitical motivations).

¹ dschestakov@gmail.com, National Research University Higher School of Economics, Moscow, Russia

Hypothesis and Methodology

Observation that education and economic outcomes in the Tsarist Russia is clearly linked is not a new one and is highly expected from common economic considerations. One of the first to note this is Arcadius Kahan (1989): we employ sources he used (Danilov, 1896, Vorobiyov, 1902) as well as 1897 census data to both state this correlation formally (Kahan only compared highly aggregated tables) and to address the question of causality. Contra claims that observational studies could not be used to address causality issues, we believe that recent developments in IV estimation give us at least suggestive evidence on the direction of the causation. We try two types of instrumental variables: rivers as natural means of transportation (as in Hoxby and Paserman, 1998 and Hoxby, 2007, however, this instrument is limited when applied to Russia, see Mikhailova and Markevich, 2013), and railroad availability (Falkus, 1972, Westwood, 1964). Since the instruments we used are clearly weak ones, usual methodological qualifications apply (Stock and Yogo, 2002, Bound et al., 1995, Moreira and Cruz, 2005, Chernozhukov and Hansen, 2008).

Results

This is still work-in-progress, and changes in results are possible due to better geocoding and additional refinement in treatment of weak instruments. However preliminary results of IV estimation for 1897 cross-section data strongly suggest that development hypothesis had upper hand for Tsarist economy, and education followed economic outcomes, not the other way round. Both rivers and railroads as instruments being taken separately are quite weak, but taken together they give us a possibility to draw inference. We estimate that economic growth of Tsarist Russia will put it on roughly comparable with Western countries ground in terms of public education in the late 1910s, if not for WWI, which corroborates to some historical accounts of the period (Gregory, 1994, Saprykin, 2009).

References

- Acemoglu D., F. Gallego and J. Robinson (2014). Institutions, Human Capital and Development. NBER Paper 19933.
- Acemoglu D., and J. Robinson (2012). Why Nations Fail: The Origins of Power, Prosperity, and Poverty. Crown Business.
- Bairoch, P. (1993). Economics and World History. University of Chicago Press.
- Bound, J., D. Jaeger and R. Baker (1995). Problems with instrumental variables estimation when the correlation between the instruments and the endogenous explanatory variable is weak. *Journal of the American statistical association*, 90(430), 443-450.
- Chernozhukov, V., and C. Hansen (2008). The reduced form: A simple approach to inference with weak instruments. *Economics Letters*, 100(1), 68-71.
- Crafts, N. (2012). Economic history matters. *Economic History of Developing Regions*, 27(sup1), S3-S15.
- Danilov, F. (1896). *Ekonomicheskaya otsenka narodnogo obrazovaniya : Ocherki s prilozheniyem izvlecheniy iz doklada na 2 Syezde russkikh deyately po tekhnicheskomu professional'nomu obrazovaniyu , proiskhodivshem v Moskve v*

1895-96 gg. - Sankt-Peterburg : Tipografiya I.N. Skorokhodova.

Engerman, S., and K. Sokoloff (2000). Institutions, Factor Endowments, and Paths of Development in the New World. *Journal of Economic Perspectives*, 217-32.

Falkus, M. E. (1972). *The Industrialisation of Russia, 1700-1914*. London: Macmillan.

Gennaioli, N., R. La Porta, R. F. Lopez-de-Silanes and A. Shleifer (2013). Human capital and regional development. *The Quarterly Journal of Economics*, 128(1), 105-164.

Gerschenkron, A. (1962). *Economic backwardness in historical perspective*. Cambridge University Press.

Glaeser, E. L. et al. (2004). Do Institutions Cause Growth? *Journal of Economic Growth*, 271-303.

Gregory, P. R. (1994). *Before command: an economic history of Russia from emancipation to the first five-year plan*. Princeton: Princeton University Press.

Hoxby, C., and D. Paserman (1998). Overidentification tests with grouped data. NBER Technical Paper No. 223.

Hoxby, C. M. (2007). Does competition among public schools benefit students and taxpayers? Reply. *The American Economic Review*, 2038-2055.

Kahan, A. (1989). *Russian economic history: the nineteenth century*. University of Chicago Press.

Mankiw, N. G., D. Romer and D. Weil, D. N. (1992). A contribution to the empirics of economic growth. *The Quarterly Journal of Economics*, 107(2), 407-437.

Markevich, A., and T. Mikhailova (2013). *Economic Geography of Russia*. The Oxford Handbook of the Russian Economy, Oxford University Press.

Moreira, M., and L. Cruz (2005). On the Validity of Econometric Techniques With Weak Instruments: Inference on Returns to Education Using Compulsory School Attendance Laws. *Journal of Human Resources*, 40(2), 393-410.

Saprykin, D.L. (2009). *Obrazovatel'nyy potentsial Rossiyskoy Imperii . - M : . IYET RAN*.

Stock, J., and M. Yogo (2002). Testing for weak instruments in linear IV regression. NBER Technical Working Paper No. 284.

Tabellini, G. (2010). Culture and Institutions: Economic Development in the Regions of Europe. *Journal of the European Economic Association*, 8: 677-716.

The First Total Census of Russian Empire. A publication of the central statistical bureau of the Ministry of Internal Affairs. Editor N. A. Troynitsky, 1905.

Vorobyov, K. (1902). Gramotnost selskogo naseleniya v svyazi s glavneyshimi faktorami krestyanskogo khozyaystva . *Trudy podseksii statistiki XI syezda russkikh yestestvoispytateley i vrachey*. - S-P.

Westwood, J. N. (1964). *A History of Russian Railways*. London: George Allen and Unwin Ltd.

Sokolova, Marina¹: Does the WTO Accession Influence the Effect of Cultural and Institutional Proximity on Bilateral Trade?

Abstract: *This research is aimed to empirically analyze the linkages between various cultural, linguistic and institutional parameters and bilateral trade in case of the WTO accession. While the cultural proximity influences positively on the trade volumes, the effect may become stronger during the WTO membership. Once the direct trade barriers such as tariffs are relaxed the indirect barriers appear to be more significant for trading partners. Alternatively, the sensitivity decreases if after the accession the country starts to trade more with institutionally less similar partners as the WTO enhances trading opportunities. The results may be different for developing and developed countries as the rich countries tend to become more institutionally similar. The analysis is proceeded with the OLS based on the gravity model theoretical framework.*

Introduction

The goal of this research project is to empirically investigate the extent to which the sensitivity of bilateral trade flows to the similarities in cultural and institutional characteristics between trading partners depends on the membership status to GATT/WTO and participation in free trade agreements.

Addressing this question is an important step towards a better understanding of the relative efficacy of institutional arrangements of regional and international economic coordination. In particular, the results of this analysis should help us assess the degree to which the potential benefits of economic coordination and cooperation (due to membership in the WTO and free trade agreements) can offset the adverse effect of cultural and institutional barriers to international trade flows.

Lots of articles have investigated the influence of various factors on trade. The standard gravity equation examines the relationship between countries' GDP, their geographical distance and trade between them. This simple specification has been extended in a variety of papers investigating the factors which influence trade flows. Along with the impact of such variables as currency unions, same legal origin and colonial links there is a part of the literature focusing on the links between culture and trade. Among the main findings in this literature is a positive relationship between trade and trust, both formal and informal (Butter, Mosch, 2003). Felbermayr and Toubal (2010) show a link between culture and trade using the example of the European Song Contest. The language proximity also plays an important role in trade. Melitz (2008) investigates the influence of direct and indirect communication on trade. Ethnic and linguistic distances can also be a barrier to trade. Gokmen (2013) shows that the trade flows between different civilizations, that once belonged to the same ideological block have been smaller in the post-Cold War epoch than they were during the Cold War.

Another significant part of literature investigates the role of the WTO and other international organizations in the trade process. There is a widespread discussion

¹ elegie@mail.ru, National Research University Higher School of Economics, Moscow, Russia

whether the effect is positive or negative (Rose, 2004; Tomz, Goldstein and Rivers, 2005) with largely mixed conclusions.

Aim and Hypotheses of the Project

This research aims to investigate whether the links between linguistic, cultural and ethnic distances, differences in the quality of government and trade become stronger or weaker after the country joins the WTO. On the one hand the direct impact of lower tariffs can be more significant for trade flows, but on the other hand, after some of the direct constraints on trade are relaxed, countries may become more sensitive to indirect barriers to trade. As the WTO membership increase trade opportunities the effect of institutional similarity may become weaker when the country trades with institutionally non-similar member of organization. But the relationship may become stronger in case the members of the WTO are more institutionally similar than non-members. This similarity is achieved in the negotiation rounds during the country's accession. The result may differ for developed and developing countries: as the developed counties become more institutionally similar during the WTO membership the effect of cultural differences can be more significant. But developing countries after accession may substitute their trade because of lower tariffs which lead to a decrease in sensitivity to indirect barriers of trade.

Methodology and Data

In the analysis, an augmented version of the standard gravity model will be employed. The model will be estimated by OLS.

For basic model specification the gravity dataset of Thierry Mayer will be used.

Bilateral trade data is taken from a Correlates of Wars project. The dataset includes trade flows from 1870 to 2009.

Geographical variables are taken from GeoDist - dyadic dataset used in Mayer and Zignago (2005). The current version includes different measures of bilateral distances for 225 country pairs, in particular simple and weighted geographical distance, and provides dummy variables representing if the countries are contiguous or share the common language and colonial relationship.

The data on religion is taken from the World Religions dataset which gives particular information about the percentage of the population who practiced a certain religion from 1945 to 2010.

The trust indicators are taken from the World Values Survey, waves from 1981 to 2005.

Information about linguistic distances is taken from Ethnologue Project. The common language family is an indicator of language distance: if the main languages of the country pair belong to the same language tree, then they are supposed to be linguistically closer than those with different families.

To measure the perceived level of public sector corruption I use Transparency International Corruption Perception Index. The given index ranks country's corruption level from 1 to 10 based on the series of surveys and expert opinions.

Governance indicators are taken from the World Bank project - "Governance Matters" produced by D. Kaufmann, A. Kraay and M. Mastruzzi. The Aim of the Project is to measure the quality of governance using five main indices: voice and

accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law and control of corruption. The research dataset contains data for 215 countries over the period of 1996 – 2012.

Expected results

This research is supposed to be my 3rd year term paper; therefore the work is in progress. At this stage I am currently organizing the master dataset and running preliminary regressions. The expected results are the following: as the WTO membership reduces the direct barriers to trade, the bilateral trade flows become dependent more on the differences in cultural and linguistic characteristics of a country pair.

References

Barbieri, Katherine and Omar Keshk. 2012. Correlates of War Project Trade Data Set Codebook, Version 3.0. Online: <http://correlatesofwar.org>.

den Butter, Frank A.G.; Mosch, Robert H.J. (2003) : Trade, Trust and Transaction Cost, Tinbergen Institute Discussion Paper, No. 03-082/3

Ethnologue: Languages of the World. Major language families of the world. Online: <http://www.ethnologue.com/>

Felbermayr, G. J. and Toubal, F. 2010. "Cultural Proximity and Trade." *European Economic Review*, Vol. 54, 279-293.

Gokmen, Gunes, Are Cultural Differences a Barrier to Trade? (October 30, 2013). Available at SSRN: <http://ssrn.com/abstract=2347644> or <http://dx.doi.org/10.2139/ssrn.2347644>

Head, K., Mayer, T. & Ries, J. (2010), The erosion of colonial trade linkages after independence *Journal of International Economics*, 81(1):1-14 - See more at: http://www.cepii.fr/CEPII/en/bdd_modele/presentation.asp?id=8#sthash.gOaPJdQC.dpuf

Kaufmann, Daniel and Kraay, Aart and Mastruzzi, Massimo, The Worldwide Governance Indicators: Aggregate Indicators of Governance 1996-2012 (September 20, 2013). The World Bank Worldwide Governance Indicators (WGI) project. Available at: www.govindicators.org

Melitz, J. 2008. "Language and Foreign Trade." *European Economic Review*, 52, 667-699.

Mayer and Zignago (2011), Notes on CEPII's distances measures (GeoDist), CEPII Working Paper 2011-25. - See more at: <http://www.cepii.fr/anglaisgraph/bdd/distances.htm#sthash.QPSUu2vP.dpuf>

Transparency International: Corruption Perception Index. Online: <http://www.transparency.org/research/cpi>

World Values Survey 1981-2008 Official Aggregate v.20090901, 2009. World Values Survey Association (www.worldvaluessurvey.org). Aggregate File Producer: ASEP/JDS, Madrid.

Zeev Maoz and Errol A. Henderson. "The World Religion Dataset, 1945-2010: Logic, Estimates, and trends." *International Interactions*, 39(3).

***Sumkin, Dmitry*¹: Asymmetry of Information in Case of Choosing a Method of Institutional Arrangements**

Abstract: In the first part we study the effect of change in a method of institutional arrangements on incentives of public officials. We investigate two methods of the arrangement and explain a relationship with the efficiency of the governance. In particular, the first method of selection is when officials are appointed. The second one is when officials form a club and control a membership by themselves. The problem is to define what the way is preferable for the government. In the second part of the research two complications connected with asymmetry of information are considered. In particular, we study how the choice of the government can change when it deals with non-standard preferences and bounded rationality of officials. And how these effects influence on the red tape, corruption and the effectiveness of work. Finally, I want to imply the theoretical results to real-world case to analyze a reform of Russian Academy of science.

Introduction

There is a strong argument that differences in the method of selection should play an important role in public officials' incentives and the policies they pursue. The first method considered is the club controlled endogenously. Club consists of the members, whose preferences and decisions relate to the set of members in the club. Club members collectively decide on the allocation of resources and sets types of public goods to produce. An example is Russian Academy of Science, where scientists control the membership by majority voting endogenously. The second method is exogenous appointment. The club still exists, but has no power to allocate the sources. Instead the official who does not belong to the club does this task and allocates resources among the members of the club.

Conflict of interest arises: since the club lives by government's money, i.e. all the property of the club is the property of the government, it has an aim to maximize production of the public good of desired type in quality. Therefore, the task of the government is to increase productivity, despite the welfare of the members of the club. Club members are concerned about their welfare and maximize their own utility function, perhaps at the expense of performance. In addition, the club may want to make this type of public good, which does not need the state.

Intuition is that for the club members it is beneficial to govern the property and membership of endogenously. Selected members can take into account the preferences of each member, i.e. maximize total utility (welfare) of the participants. Moreover, they will be chosen for this purpose. Each voter maximizes his expected utility function, choosing the candidate he liked.

Aim of the Project

Which method (whether a club or an appointed bureaucrat) is more beneficial to the government (without an asymmetry of information)? How do "non-standard" preferences and "bounded rationality" affect the production of public goods? Which

¹ dsumkin@nes.ru, New Economics School, Moscow, Russia

form of the method is more beneficial to the government for profitable production of the required types of public goods?

Note: it turns out that the control of the club is made by the government, which maximizes the results, but can't directly influence members. On the other hand, exogenously appointed bureaucrat is fully controlled by the government, which can fire or punish him at any time.

Hypotheses and Methodology

1) Club produces public good. Therefore, the government is interested in this industry and therefore is sponsoring the club's activities. Consequently, the government has an interest and ability to influence the redistribution of resources to improve the performance of club members.

Asymmetry of information:

2) "Non-standard" preferences of agents. In other words, it is a resource allocation of club members not only for personal purposes. Member of the club has "non-standard" preferences, in sense that they do not maximize their utility functions, but it also take into account, for example, the opinion of the club. Each member of the club wants to pursue their interests and at the same time to be in the club. If I do not meet the criteria for election into the club, I will not be elected. However, joining the club, I can pursue their interests in the extent needed, and set the type of public good, which is interesting to me more than others and allocate resources so that my type of public good produced to the maximum extent.

Exogenously appointed official has "non-standard" preferences, in sense that he does not maximize his utility function or the social one, but instead for example focuses to the opinion of the government. Due to the fact that he controls the resources, he can pursue public interest and to encourage the production of a type of public good, which is required by the government.

3) "Bounded rationality". Official has imprecise goals, no certain idea of how to achieve these goals (how better to allocate resources) and how to measure the success of their activities. Let competence official and members of the reallocation of resources in the problem varies.

4) Club members have a better idea of how to reallocate resources so that their type of public good produced to the maximum extent.

The idea that the method of institutional arrangements influence to the incentives of public officials has been studied a lot. Closest articles to the proposed analysis are:

1) In the work [1] Maskin and Tirole mentioned that the condition that nonaccountability is most desirable when the electorate is poorly informed about the optimal action.

2) Alesina and Tabellini in [2] say that the analysis rests on a fundamental assumption. Bureaucrats want to signal their competence for career concerns, politicians for reelection purposes.

3) In the works [3] and [4] is considered the optimal number of participants in the club, but the question of the production efficiency is not stated.

4) [5] is classical work for the analysis of the bureaucracy and [6-12] are on "Non-standard" preferences and "Bounded rationality"

Setup of the model is:

Government: maximizes productivity.

Bureaucrat: maximizes a productivity of scientists or own welfare. For simplicity one can assume that we deal with maximization of productivity.

Club: We consider a finite group X of infinitely lived individuals who are potential club members. For simplicity, let's take $x = 3$. Let's for the first step simply assume, that each member maximizes its own utility.

It is an analog of welfare maximization. However, welfare of scientist is not the same as its productivity. It means that there is a part of scientists, whose utility is less, if they produce more; and there is the other part of scientists, whose utility is more if they produce more. We can call the first part of scientists as "lazy" and the other part is "career concerned". In this sense, welfare of scientist is not the same, as its productivity.

Measurement of productivity, as a consequence, is not a big problem. In the assumptions we get, it is the same as generally accepted parameters, as H-index, number of patents etc.

For "career concerned" scientist the utility can be defined as a linear function of parameter "productivity". It is the same as to say that we define a linear order on the set of utilities and can compare scientists by their productivity.

$U_{cc}(\text{productivity, something}) = \text{productivity} * V(\text{something}) + \text{other something}$.

However, it remains unclear, what is the welfare form of "lazy" scientist. Here, we can't take away productivity from utility and it remains "something unclear" to define, as we can't even compare scientists with each other, because order is not defined here. But, we can assume, that Utility of this type of scientist depends on the leisure also. "Lazy" scientist cares about productivity only at the extent, which is required exogenously. He wants only to survive via publishing and maintain his status of scientist. The remaining part of time, he can do whatever he wants, including sleeping or scientific work for fun without a goal of publication. As one can observe, different people have different preferences, and unfortunately we can't say how much time a "lazy" scientist devotes to sleep and how much he devotes to research for fun. In result, we can assume that there is a random variable - "amount of scientific work for fun" - " α ". This time is very important as such a scientist can produce "a scientific breakthrough" - " θ " with some probability, which also leads to increase of productivity and increase of its utility.

$\text{Productivity}(\text{leisure}, \theta, \alpha, \text{contract amount}) = \text{contract amount} + E_{\theta}(E_{\alpha}(\text{leisure}))$

To reach "a contract amount" "lazy" scientist works like "career concerned" one. The difference is that in the former case the utility is decreasing or concave, but in the second case, it is increasing or satiates at the level, that is higher than minimal contract amount.

Results

The literature review is carried out. In the next steps a modeling is expected to find out the answers to stated questions.

References

Maskin, Eric & Jean Tirole. 2004. "The Politician and the Judge: Accountability in Government. *American Economic Review* 94(4):1034–1054.

Alesina, Alberto & Guido Tabellini. 2007a. "Bureaucrats or Politicians? Part I: A Single Policy Task." *American Economic Review* 97(1):169–179.

Acemoglu, Daron & Egorov, Georgy and Sonin Konstantin "Dynamics and Stability of Constitutions, Coalitions, and Clubs" *American Economic Review* 2012, 102(4): 1446–1476.

Roberts, Kevin (1999) "Dynamic Voting in Clubs" (not published)

A. Banerjee, A theory of misgovernance, *Quarterly Journal of Economics*, Volume 112, Issue 4 Pp. 1289-1332.

Canice Prendergast The Limits of Bureaucratic Efficiency *Journal of Political Economy*, Vol. 111, No. 5 (Oct., 2003), pp. 929-958

Auriol, Emmanuelle, and Régis Renault. 2008. "Status and incentives." *The RAND Journal of Economics*, 39(1): 305-326.

Bartling, Björn, and Ferdinand A. von Siemens. 2010. "The intensity of incentives in firms and markets: Moral hazard with envious agents. *Labour Economics*, 17(3): 598-607.

Bénabou, Roland, and Jean Tirole. 2002. "Self-Confidence and Personal Motivation." *The Quarterly Journal of Economics*, 117(3): 871-915.

Bénabou, Roland, and Jean Tirole. 2003. Intrinsic and Extrinsic Motivation. *The Review of Economic Studies*, 70(3): 489-520.

Bénabou, Roland, and Jean Tirole. 2004. Willpower and Personal Rules. *Journal of Political Economy*, 112(4): 848-886.

Drugov, Mikhail. 2013. Optimal Patronage. <https://sites.google.com/site/mdrugov/research>.

Sun, Huojun¹: Trust by Endogenous Social Norms

Abstract: *This paper investigates whether the endogenous adoption of a social norm of trustworthiness can help a society coordinating on an efficient outcome, characterized by high levels of trust and trustworthiness. We first introduce a theoretical analysis of the consequences of the introduction of a social norm of trustworthiness, which largely builds upon Anderlini and Terlizzese (2012)'s work. Based on a simplified version of this model, we want to study whether and how the endogenous adoption of the norm determined by a voting mechanism can affect the equilibrium outcome, under alternative hypothesis on the distribution of the players with different levels of trustworthiness in society, and on the ex-ante degree of knowledge of this distribution. In line with the model, we find that the introduction of the norm induces a significant increase in the levels of trustworthiness, and to a lesser extent also of trust. The endogenous introduction of the norm by means of a majority-voting rule does not significantly change behavior, with respect to what is observed when the norm is exogenously imposed. In contrast with our theoretical predictions, however, not all subjects seem to be able to anticipate the change in behavior induced by the introduction of the norm, and a majority of them vote against the norm. Subjects with higher cognitive abilities and with a background in statistics are more likely to vote in favor of the norm. In an additional treatment, we provide information about the aggregate behavior with and without the norm; we find that on average this additional information does not increase the likelihood of the norm being adopted. To conclude, in our set-up, subjects seem to be unable to endogenously adopt an institution which, when exogenously imposed, proves to be efficiency enhancing.*

Introduction

At least since the time of Aristotle, it is highly admitted among the legal scholars that the law defined as an obligation backed by powerful state coercion can create and maintain social order, such as enforcing property rights, adjudicating disputes, and providing the efficient level of public goods through adequately collecting a variety of taxes (e.g. public transportation). Particularly in a standard contractual relationship, “more law”, it typically is assumed, can increase the likelihood of contract performance by increasing the probability of enforcement and the cost of breach, naturally stimulating all manner of reliance investments that have specific value in the contractual relationship (Polinsky and Shavell, 2008). Nearly half of the world’s governments, however, fail to provide a sufficiently strong system of contract enforcement, so it is really important to understand how people who lack the protection of an effective governmental legal environment can establish private-order institutions to facilitate mutually advantageous exchanges (Leeson and Williamson, 2009).

In his very influential empirical anthropological field studies, Ellickson (1991) has presented social norms as the alternative to government as a mechanism of social control. However, the precise definition of social norm is highly controversial. Sociologists sometimes use “social norm” to refer to a particular behavior common in a setting (descriptive norm), while philosophers often define “social norm” as the

¹ huojun.sun@edle-phd.euInstitute of Law and Economics, Erasmus Rotterdam University, Netherlands

perception of common approval or disapproval of a particular kind of behavior (injunctive norm). Focusing on the second view, Cooter (1998) uses “social norm” to indicate a consensus in a community concerning what people ought to do, and this consensus on an obligation can affect what people actually do. In brief, “social norm” in Cooter’s perspective means an effective consensus obligation (also see Bicchieri, 2006).

Following this positive perspective of social norms, Anderlini and Terlizzese (2012) model trust as an equilibrium phenomenon. In their model, they treat a bilateral contractual relationship in the absence of contract enforcement as a one-shot binary trust game: the first mover makes an offer to the trustee, and this offer generates a surplus proportional to the offered sum. The second mover then decides whether to cheat and keep the entire surplus, or to share it with the first mover. Cheating entails a cost, characterized by two components: one component is idiosyncratic and depends on the exogenously given “type” of the second mover, while the second component is socially determined and common to all agents, and depends on the total number of transactions in society that go through without cheating. Hence, the stronger is the norm of trustworthiness in a society, the higher the cost of cheating. As a result, the introduction of the norm transforms the trust game into a coordination game with a high-trust and a low-trust equilibrium, which are Pareto-ranked.

Aim of the Project

The norm of trustworthiness may differ across societies and that these differences affect individual behavior. However, it is still unexplained about how the social norm of trustworthiness arises in the first place. Anderlini and Terlizzese (2012) simply assume that the “social sensitivity” to the norm-driven component of cheating cost is exogenously given. In this study we take a further step to investigate whether the endogenous adoption of a social norm of trustworthiness, particularly by a voting mechanism, can help a society in coordinating on an efficient equilibrium, characterized by high levels of trust and trustworthiness. Starting from a streamlined version of Anderlini and Terlizzese’s model, we theoretically show that all subjects, regardless of their preferences and expectations, should vote in favor of the norm, hence the norm should be endogenously introduced. As a consequence, the outcome of the vote cannot be interpreted as a signal of others’ intentions, and it should not matter whether the norm is exogenously imposed or endogenously adopted.

The theoretical model informs our empirical analysis, which is based on a laboratory experiment. In our experiment, each subject plays three one-shot games with three different partners. In particular, after subjects have experienced both the binary trust game and the trust game with a norm of trustworthiness in a perfect stranger design, they can choose the governing institution for the final stage game under the majority voting mechanism. We want to experimentally examine whether subjects are actually willing to opt for having a norm of trustworthiness in place. In addition, we are also interested in how endogenous adoption of norm affects the beliefs and the behavior of individuals.

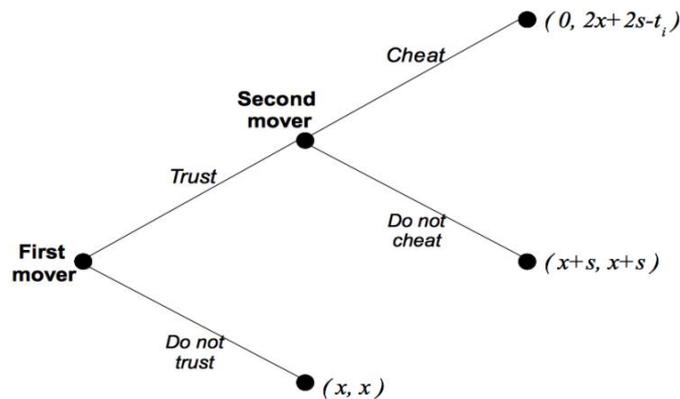
Hypotheses and Methodology

Theoretical model

Following the Anderlini and Terlizzese (2012)'s approach, we assume that there are two types of agents in a society, "high" (H) and "low" (L). For simplicity, we additionally assume that agents are risk neutral and that H-type agents have a preference for honesty and suffer a psychological cost $t_H > 0$ when abusing their partner's trust, while L-type agents are only interested in (expected) monetary payoffs ($t_L = 0$). At the beginning of the stage game, agents are randomly assigned to the role of first or second mover, and matched in pairs. Agents choose their strategy before knowing their role, and the strategy determines their action both as a first and as a second mover.

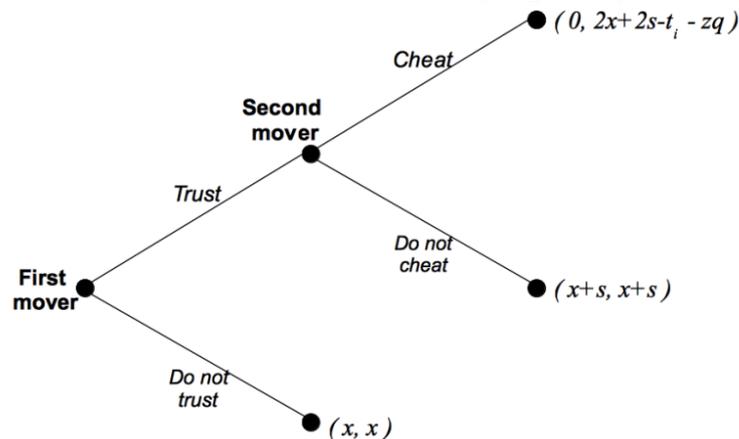
As an additional simplification to the original model, we let the first mover's choice be binary: he can only choose whether to invest all his endowment or not. The basic stage game – where no norm of trustworthiness is in place – is depicted in Figure 1.

Figure 1. Stage game in the basic set up (*Baseline*)



We assume that idiosyncratic cost of cheating for the H-type agents are so high that H-type will never cheat: $t_H > x+s$. Let p represent the proportion of H-type agents in society. If p is common knowledge, in this basic game, the first mover will trust if $p > x/(x+s)$. Let us denote this threshold Θ .

Figure 2: stage game with a social norm of trustworthiness (*Exogenous*)



Now consider the trust game with social sanction depicted in Figure 2, where z measures the strength of the social sanction, and q represents the fraction of transactions in society where cheating does not take place. As in the basic scenario, the H-type agents would never cheat, but the L-type agents may choose not to cheat either, if $q > (x+s)/z$. Let us denote this second threshold θ

If $p < \theta < \Theta < 1$, this game has two equilibria with rational expectations. In the low-efficiency equilibrium, $q = p$ and L-type agents in the role of second movers would cheat. Anticipating this, all agents in the role of first movers will not trust. In the high-efficiency equilibrium, instead, $q = 1$ and the L-type agents in the role of second movers would not cheat. Anticipating this, all agents in the role of first movers will trust.

We extend the model and consider the case in which, prior to playing the game, agents express their preference on whether to have or not a social norm of trustworthiness in place. More specifically, we consider the voting mechanism, i.e. the social sanction mechanism is determined by a majority rule. The main question we would like to pursue is whether this mechanism can serve as a coordination device to drive the society towards the efficient equilibrium. Here, we first consider the case in which the proportion p of H-type agents in the society is common knowledge, and then extend the model to consider what happens when instead we admit that agents may have different priors on p . Theoretically, we predict that all players will opt for having a norm of trustworthiness.

Experimental Design

The experiment consists of two parts. In Part 1, each subject plays three one-shot games, with three different partners. The first game is the binary trust game (*Baseline*) presented in Figure 1. We adopt the strategy method (Brandts and Charness, 2011): all subjects have to choose their action both as a first mover and as a second mover, before knowing which role they will actually be assigned. Once all subjects have made their two choices, roles are randomly assigned and subjects are matched in pairs. In each pair, payoffs are determined by the choice each of the two players made for the role he is actually assigned. To reduce the risk of spillover effects from this phase to the following ones, the outcome of this phase is not revealed to the subjects, until the end of the session.

In the second game (*Exogenous*), the strategic environment, the information structure and the options subjects have to choose are the same as in the *Baseline* game but, here, a social norm of trustworthiness is exogenously introduced, under which cheating is sanctioned and the severity depends on the number of the transactions in society that go through without cheating (Figure 2)¹.

The third game is designed to study whether – when the social norm is endogenously determined by the subjects themselves – coordination becomes more or less easy to achieve than in the *Exogenous* game. Here we consider a majority voting rule. Specifically, before playing the trust game, each subject votes either in favor or against the social sanction mechanism.

¹ In order to control for possible “order effects”, we allow our subjects in 2 out of 4 sessions to play the standard trust game (*Baseline*) before playing the trust game with social sanction (*Exogenous*), and in another 2 sessions, all subjects play the original trust game after playing the trust game with social sanction.

In Part 2, all subjects fill in a questionnaire including questions on their individual characteristics (gender, age, education, social status), general trust, risk attitudes, and social preferences. These questions allow us to study how personal characteristics may affect the impact of the introduction of an endogenous/exogenous norm on individual behavior. The outcomes from the three games in Part 1 are disclosed only at the end of Part 2.

Our experiment comprises two treatments: B-E-V, and E-B-V, where B stands for *Baseline*, E for *Exogenous*, and V for *Voting*. We run two sessions per treatment. Each session involves 12 subjects, divided into 2 groups of 6 players; the group composition is kept constant during the whole session. Each subject interacts exclusively with others in his own group and could not get the feedback until the end of session; hence, we are able to treat each subject as an independent observation.

Hypotheses

Results from the *Baseline* game will be used to classify subjects into 4 categories, depending on their choices as first and second movers. Specifically, from the actions taken as first movers, we can infer a subject's beliefs on others' trustworthiness: those who trust must hold optimistic beliefs about their partner's reciprocity, while others who do not trust should hold pessimistic beliefs. And from the actions as second movers, we can distinguish between H-type agents (reciprocators) and L-type players (self-interested). Therefore, we obtain four types of players, namely, pessimistic and self-interested (P-L), pessimistic and reciprocal (P-H), optimistic and self-interested (O-L), and optimistic and reciprocal (O-H) players.

We will use the collected data to test the following hypotheses.

As a result of the exogenous introduction of a social sanction, trustworthiness increases among the P-L and O-L players, and does not vary among the P-H and O-H players.

As a result of the exogenous introduction of a social sanction, trust increases among the P-L and P-H players, and does not vary among the O-L and O-L players.

When they can opt for the introduction of the social sanction for cheating, all players choose in favor of it.

The endogenous introduction of a social sanction through majority voting works as a coordination device, and induces higher levels of trust and trustworthiness, as it signals that most of the players are holding high beliefs on others' trustworthiness.

Results

Result 1. The exogenous introduction of a norm of trustworthiness induces an increase in trustworthiness. The significance of the increase is not affected by the order of the Baseline and Exogenous games.

Result 2. Facing the norm of trustworthiness, both the Pessimist-Selfish and Optimist-Selfish subjects behave more trustworthily, while Pessimist-Honest and Optimist-Honest players reduce their level of trustworthiness significantly.

Result 3. The exogenous introduction of the norm does not induce a significant increase in the level of trust. However, trust decreases significantly if the norm is exogenously removed.

Result 4. Entering the Exogenous game, the Pessimistic subjects increase their trust levels significantly, although the effect of the norm is weaker among Pessimist-Honest subjects. However, the Optimist-Honest subjects reduce the trust when the exogenous norm is introduced.

Result 5. When subjects vote for (not) introducing the norm, the levels of trust and trustworthiness are not significantly different from the case in which the norm is exogenously (not) introduced.

Result 6. The norm of trustworthiness is endogenously activated among only three groups, and these groups have achieved a much higher level of trustworthiness in the Exogenous game relative to other groups. Within these three groups, those who vote in favor of the norm behave more trustfully in the Endogenous game.

Result 7. Only about 30% of subjects vote for having a norm of trustworthiness. And the percentage is insensitive to the order of experimental design.

Result 8. Those who vote in favor of the norm act more trustfully, and react more to the exogenous norm than others who vote against the norm, although these two kinds of subjects behave similarly in the Baseline.

Result 9. Subjects with higher cognitive abilities, and with a background in statistics are more likely to vote for the norm.

Result 10. Even though exposed to the feedback in the additional two sessions, about 83% of the subjects do not change their votes. Consequently, the additional information unexpectedly reduces the likelihood of the norm being adopted. In fact, the information about others' trusts levels in the Exogenous game positively affects a subject's decision to vote in favor of the norm. In addition, those who preferred the norm in the third game are more likely to vote again for the norm.

References

- Anderlini, L. and Terlizzese, D., 2012, "Equilibrium Trust", EIEF Workingpaper.
- Bicchieri, C., 2006, *The Grammar of Society: The Nature and Dynamics of Social Norms*, Cambridge University Press.
- Brandts, J., and Charness, G., 2011, "The Strategy versus the Direct-Response Method: A First Survey of Experimental Comparisons", *Experimental Economics*, 21, 1-24.
- Cooter, R., 1998, "Expressive Law and Economics", *Journal of Legal Studies*, 27, 585-608.

Ellickson, R., 1991, *Order Without Law: How Neighbors Settle Disputes*, Cambridge, Harvard University Press.

Leeson, P., and Williamson, C., 2009, "Anarchy and Development: An Application of the Theory of Second Best", *Law and Development Review*, 2(1), 76-96.

Polinsky, A. M. and Shavell, S., 2008, "Economic Analysis of Law", *The New Palgrave Dictionary of Economics*, ed. by Steven N. Durlauf and Lawrence E. Blume.

Tahirov, Rustam¹: Major Reasons for High Intermediation Cost (Lending Rate) in Azerbaijan

Abstract: *This paper studies the underlying factors of high lending rate in Azerbaijan over the last five years. In particular, it carries out different empirical estimations to evaluate extent to which specific factors, including bank size, bank efficiency, concentration level, inherent risks as well business environment and competition affects interest rate. The estimation results show that both bank specific factors and external factors increases cost of lending. In addition, it reveals that there are ample opportunities within banks to improve operations and reduce cost of the lending.*

Introduction

Unprecedented growth of the economy since 2003 led to the situation wherein the financial sector (bank and non-bank alike) has grown tremendously in Azerbaijan. During 2003-2008 years, annual growth rate of loans and deposits were more than 50%. Due to global financial crisis growth rate subdued, but continues to grow in post-crisis period. However, lending rate is very high. Average lending rate is around 15%. However, it should be considered that without various government sponsored programs (concessional loan to strategic business, etc), average lending rate would be even higher. Therefore, there is a need for analyzing underlying factors that lead to high interest rate in Azerbaijan.

Research result shows that following factors lead to high interest rate:

inherent risk of banks (particularly credit risk)

high cost of funding (mainly deposit rates)

low operational efficiency

unfavorable business environment

poor level of infrastructure (collateral realization, court issues, etc)

low economies of scale

2. Aim of the Project;

The main objective of the project is to examine the influence of different factors on bank lending rate.

The results of analyzing could be used both by banks and regulator in designing set of measures to reduce lending rate.

3. Hypotheses and Methodology;

The following general formula estimates the impact of macroeconomic and banking industry variables on interest rates in a panel dataset for 7 years (2009-2013):

$$IR_{i,t} = \alpha IR_{i,t-1} + \beta Industry_{i,t} + \gamma Macro_{t-1} + \varepsilon_{i,t} \quad (1)$$

Where $IR_{i,t}$ is the interest rate for total loans in bank i for period t . Since interest rates depend on previous period rates, we include one period lagged dependent variable as an explanatory variable to our model. Moreover, for more detailed analysis above mentioned interest rates were separated in two parts: i) interest rates on loans for individuals and ii) interest rates on loans to businesses.

¹ r.tahirov@gmail.com, Khazar University, Azerbaijan

Respectively, explanatory variables of these interest rates have also been differentiated:

$$\begin{aligned}
 IR_individuals_{i,t} = & \\
 = & \alpha_1 IR_individuals_{i,t-1} + \beta_1 IR_deposit_{i,t} + \beta_2 NPL_{i,t} + \beta_3 Op_efficiency_{i,t} + \\
 & \beta_4 Leverage_{i,t} + \gamma_1 N_GDP_{t-1} + \gamma_2 CPI_{t-1} + \gamma_3 Wage_{t-1} + \delta_1 Size + u_{i,t} + \varepsilon_{i,t}
 \end{aligned}
 \tag{2}$$

$$\begin{aligned}
 IR_business_{i,t} = & \alpha_1 IR_business_{i,t-1} + \beta_1 IR_deposit_{i,t} + \beta_2 NPL_{i,t} + \beta_3 Op_efficiency_{i,t} + \\
 & \beta_4 Macro_{t-1} + \beta_5 Leverage_{i,t} + \gamma_1 GDP_{t-1} + \gamma_2 CPI_{t-1} + \delta_1 Size + u_{i,t} + \varepsilon_{i,t}
 \end{aligned}
 \tag{3}$$

Where *IR_deposit*, *NPL*, *Op_efficiency* and *Leverage* are deposit interest rates, non-performing loans, ration of non-interest costs on total (interest and non-interest) revenue and the ratio of assets to capital respectively. These variables are used to explain cost efficiency of each bank in each period of time. In addition, *N_GDP* is non-oil GDP which identifies economic situation not connected with oil production and explains the economy which individuals are mostly connected. For business loans total GDP were used as a macroeconomic variable. *CPI* is a variable for inflation and is the same in both equations. Additional *Wage* variable have been used to explain welfare and credit worthiness of individual borrowers. This variable is a nominal average monthly wage. *Size* is the bank's market share in total loans in each time period.

In our estimations we use Arellano – Bond GMM estimator approach to avoid below mentioned issues:

Autocorrelation issue which may rise due to lagged dependent variable; and Bank specific characteristics may be correlated with explanatory variables.

To cope with second issue difference GMM model uses first-differences and first-differenced lagged dependent variable is instrumented with its past levels, which tackles the first issue

Results

The results show that high funding rate (deposit rate) is by far the most important driver of lending rate in Azerbaijan. Bank have limited to access to financial markets. Banks heavily rely on deposit to fund lending activities.

The second important driver of high lending rate is inherent risks (particularly credit risk). Banks are expected to require higher interest spreads to compensate for funding riskier projects, and to maintain adequate loan reserves.

The third driver of high lending rate is operational inefficiency of banks. Higher operating costs are reflected in higher lending rates.

The next driver of high interest rate is low business environment and weak infrastructure. Particularly, legislative issues in collateral realization as well lengthy court processes are important factors.

Size turns out to be an important driver of high interest rate. Sizes of banks are small and therefore banks can't benefit from economies of scale.

References

Carbó Valverde, S., and F. Rodríguez Fernández, 2007, "The Determinants of Bank Margins in European Banking," *Journal of Banking and Finance*, 31, 2043–2063.

Claeys, S., and R. Vander Venet, 2008, "Determinants of Bank Interest Margins in Central and Eastern Europe: A Comparison with the West," *Economic Systems*, 32, pp. 197–216

Ho, T.S., and A. Saunders, 1981. "The determinants of bank interest margins: theory and empirical evidence." *Journal of Financial Quantitative Analysis* Vol. 16, pp. 581–600.

Gelos, R., 2006. *Banking Spreads in Latin America*. IMF Working Paper WP/06/44, (Washington: International Money Fund).

Demirgüç-Kunt, A., and H. Huizinga, 1999, "Determinants of Commercial Bank Interest Margins and Profitability: Some International Evidence," *World Bank Economic Review*, Vol. 13, No. 2, pp. 379–408.

Angbazo, L., 1997. "Commercial bank Net Interest Margins, default risk, interest rate risk and off balance sheet banking." *Journal of Banking and Finance* 21, pp. 55–87.

Blundell, R.W., and S. R. Bond, 1998. "Initial conditions and moment restrictions in dynamic panel data models." *Journal of Econometrics* Vol. 87, pp. 115–143.

Entrop, O., C. Memmel, B. Ruprecht, and M. Wilkens, 2012. "Determinants of bank interest margins: Impact of maturity transformation." Working Paper. Deutsche Bundesbank Discussion Paper Series 2: Banking and Financial Studies No 17/2012 (Frankfurt am Main).

Guiso, L., S. Paola, and L. Zingales, 2006. "The Cost of Banking Regulation." NBER Working Paper 12501 (Cambridge, MA: National Bureau for Economic Research).

Calixte Ahokposi, 2013, "Determinants of Bank Interest Margins in Sub-Saharan Africa", IMF Working Paper

Vasilyeva, Olga¹: Do Mayors Elections Matter for Productivity? Evidence from Russian Firm-Level Data

Abstract: *Do elections matter for economic performance? What way of taking office by officials – through elections or appointments - is more beneficial for local people? To answer these questions, I look at the replacement of directly elected mayors by city-mayors in Russian cities in 2000s. By using firm-level panel data from Russian cities, I attempt to assess the effect of such replacement on conditions of doing business and firms' productivity.*

Introduction

Do elections matter for economic performance? –Are elected or appointed officials more beneficial for local residents? The recent literature doesn't give an unambiguous answer to this question.

In this project I look at the replacement of directly elected mayors by state-appointed city-mayors in Russian cities. I attempt to assess the effect of such replacement on conditions for doing business and firm productivity in various Russian regions. This replacement has few effects on the power balance in Russian regions. First, local executives become accountable not to inhabitants but rather to the ruling party in local legislatures. Then, city-managers have less power for decision making and policy choice, so that the replacement of elected mayors by city-mayors weakens the local (municipal) authorities while it empowers a regional tier of governance (particularly governors). Municipal executives can't challenge governors' decisions anymore. The effects of such changes on business climate and thus on productivity are not clear.

I focus on firms' productivity because it is most closely related to social welfare. All institutional changes which increase firm productivity contribute heavily to welfare growth.

This project is relevant for several strands in the literature. First, it contributes to the discussion about the efficiency of accountability mechanisms, namely whether election or appointment of officials benefits local people more, especially under non-democratic regimes with ill-developed institutions. Second, this project is related to the discussion about the advantages and drawbacks of decentralization. Also the results of the paper might be relevant for the discussion about the effects of state capture by local versus national elites.

Aim of the Project

In this project I attempt to assess the effect of replacement of mayors by city-managers in Russian cities on firms' productivity.

Hypotheses and Methodology

I test the following hypothesis: TFP of firms located in the cities governed by city-managers is lower than TFP of firms located in the cities governed by directly elected mayors.

¹ ogvasilyeva@gmail.com, Amur State University and Economic Research Institute FEB RAS, Russia

Data

To test the hypothesis, I use firm-level data for Russian firms located in cities with population more than 100 thousands inhabitants for 2005-2012. The source of data is RUSLANA, the database which includes financial data (balance sheets and income statements) for Russian firms as well as their location, ownership etc. Some data about cities characteristics come from Rosstat, whereas data about a political situation in a city (such as if a mayor or a city-manager governs a city, or a share of the Ruling party in a city legislature) are collected by author from open sources.

I follow Earle and Gehlbach (2013) and use following specification for baseline estimations:

$$x_{jcit} = f_i(k_{jcit}, l_{jcit}) + \mu \cdot D_{ct} + \gamma \cdot Z_{jct} + \varphi_{it} + w_t \cdot a_j + \eta_{jcit}$$

where j indexes firms, c indexes cities, i indexes industries, and t indexes years. The variable x_{jcit} is output, k_{jcit} is capital stock, l_{jcit} is employment. I assume unrestricted Cobb-Douglas production function f_i , which varies by manufacturing industries at the two-digits level.

The variable dummy D_{ct} is an indicator for a city-manager (0 if a city is governed by a directly elected mayor and 1 if a city is governed by a city-manager). Thus, μ is our coefficient of interest, which shows the effect of the shift from mayors to city-managers on productivity.

I control for heterogeneity over time, across firms, cities, and industries. The vector Z_{jct} includes time-varying firm and cities characteristics. I include full set of industry-year fixed effects φ_{it} . Moreover I correct for firm-specific heterogeneity through the term $w_t \cdot a_j$, where w_t is a vector of aggregate time variables and a_j is a vector of firm-specific coefficients. Similarly to Earle and Gehlbach, I consider two specifications of w_t . The first defines $w_t = 1$, so that a_j is a firm fixed effect; the second defines $w_t = (1, t)$, with a_j a firm-specific linear trend.

Although this empirical strategy controls for any time-invariant or constantly trending differences in productivity across cities and firms that could be correlated with a shift from an elected mayor to a city-manager, there is still a concern that such change might be endogenous to firms' performance in a city. Local elites, representatives in local and regional legislatures, as well as governors might respond to firms' performance in a city. They could support or resist establishment of a new way of city governance. To address this concern, I use a 2-year lagged dummy variable for city-managers as well as applying 2SLS using as instruments the Herfindahl-Hirschman Indexes estimated for political parties in local legislatures for neighboring cities. The HHI for neighboring cities within a region can serve as a measure of the ability of the ruling party to implement a new way of taking office by municipal executives.

Expected results

I expect to find a difference in productivity between firms located in cities which are governed by city-managers and directly elected mayors.

References

Earle, J.S. and Gehlbach, S. (2013) "The Productivity Consequences of Political Turnover: Firm-Level Evidence from Ukraine's Orange Revolution" (September 5,

2013). Available at SSRN: <http://ssrn.com/abstract=2279787> or
<http://dx.doi.org/10.2139/ssrn.227978>

Zubanov, Andrey¹, Karabekyan, Daniel²: Commuting Time as a Determinant of Academic Achievement

Abstract: *The paper considers the issue of influence of commuting time on academic achievement of students. The model for a student who allocates time on class attendance, self-study and leisure is done, which captures that to attend classes it is necessary to spend some time commuting. We show that due to the fact that for students of exact sciences attendance is more important, then they are more vulnerable to increases in commuting time than those who study on humanitarian faculties. The hypothesis is tested on data from National Research University Higher School of Economics which provide with time distribution of students, their grades and characteristics to control on. The hypotheses about grade inflation and influence of socioeconomic parameters are also considered in the paper. The main policy implication is that authorities of universities are to consider vulnerability of academic performance of students of exact sciences and allocate students by dormitories wiser and rent or built dormitories and campuses in locations which are more optimal. For example, utilitarian welfare function for university authorities suggests that it is better to accommodate students who study Math closer to campuses than those whose education involves more humanities.*

Introduction

The research project relates to economics of education and concerns determinants of academic achievement. More specifically, it involves building a model of a student and a data set which covers grades and time distribution of students of National Research University, Higher School of Economics (NRU HSE) in Moscow campus.

The model examines a student who distributes time on class attendance, self-study and leisure, but to attend classes a student must spend some time commuting to the university or a school. The model is based on the model of Bratti, Staffolani. The findings of researchers claim that students who study exact sciences are need more class attendance to be academically successful than those who study humanities. Due to this fact, students of exact sciences become more vulnerable to increases in commuting time than ones who study humanities.

The data set is a merger of a survey and data gathered by NRU HSE officials. The survey is Student Experience in the Research University (April-May 2012) which is useful as it contains questions about time distribution of students of HSE. The survey was carried out Centre of Institutional Monitoring of HSE. Another piece of data is information from ASGI (Applicant, Student, Graduate, Alumni; in Russian «Абитуриент, Студент, Аспирант, Выпускник»: АСАВ) which is prepared by Direction of Information Technology of NRU HSE. It includes data about all grades of students, their faculties, years of education, their personal characteristics which are crucial to control on, their entry exams results, whether they live in the dormitory

¹ andr1904@gmail.com, andreyzubanov@yahoo.com, National Research University Higher School of Economics, Faculty of Economics, Moscow, Russia

² Department of Economics and International Laboratory of Decision Choice and Analysis, National Research University Higher School of Economics, Moscow, Russia.

and if yes in which one. The survey data allows testing the model of time allocations itself and the second one is necessary to prove the hypotheses about influence of commuting time on academic achievement. The survey and the other part of the data have same IDs for students so they can be merged which makes possible a wide range of hypotheses to be tested.

Using the data sets it is also possible to check empirical findings of authors about positive participation in sport (see Gibbison et al.) and cultural activities and academic achievement, amount of correction between entry exams or academic contests and grades. Having information about grades of students for a number of years a test for presence of grade inflation in NRU HSE will also be made.

Based on the model results supported with empirical evidence it is possible to formulate common stylized facts and policy implications for the authorities of universities about how to choose location for dormitories, accommodate students better. The issue is especially topical in NRU HSE as many of its students live in dormitories which are located fairly far away in the suburbs of Moscow.

Aim of the Project

The purpose of the projects is to find out whether students who study mathematical subjects are more sensitive to changes in the amount of time spent commuting than students of humanitarian faculties. The data will help to test other hypotheses on sample of the students of NRU HSE concerning influence of socioeconomic parameters on academic achievement, distribution of time, membership and involvement in sport and cultural activities and other. In addition, policy implication about optimal student accommodation to dormitories and dormitory locations will be proposed. Study of socioeconomic characteristics will help to widen knowledge about student's nature and compare them to their peer abroad. And it is important to estimate grade inflation because it has great influence on incentives of students.

The paper formulates policy implications which are important and can be used by officials. As there is fairly little research of this kind is done on Russian data, the paper will help researchers to advance in economics of education even further.

Hypotheses and Methodology

The research involves using a merger from two data bases presented above and allows to map each student who took part in the survey his or her grades, time allocation, social characteristics, entry exams results. The primary aim is to test hypothesis about whether students of exact sciences are more sensitive to changes in commuting time. This is made by observing how much difference in commuting time changes academic performance of a student concerning its specialization on exact sciences or humanities. Other hypotheses concern positive correlation between time spent on sport and cultural activities, other socioeconomic parameters and presence of grade inflation. All results will be controlled on age, gender, entry exam results or participation in academic contests, birthplace and other.

Results

Location of dormitories and campuses are closely related to the topic as they are the ways for the university to influence academic achievement through better

allocation of students to dormitories. So, using utilitarian approach to social welfare it is better to accommodate students of exact sciences closer to campus. Another result is that it is now possible to evaluate effectiveness of investments in dormitories with another important factor: by how much this change in location will boost academic success of the students. After the data will be carefully scrutinized, other hypotheses will be proved by empirics and some new empirical results will emerge.

Possible extensions could be analyzing data for other universities in Russia, adding psychological variables (as was made by Nye, Orel and Kochergina for HSE campus in Nizhniy Novgorod).

References

Bratti M., Staffolani S. Student time allocation and educational production functions //Quaderns di Ricerca. – 2002. – №. 170.

Nye, John, Ekaterina Orel, and Ekaterina Kochergina. "Big Five Personality Traits and Academic Performance in Russian Universities." Higher School of Economics Research Paper No. WP BRP 10 (2013)

Gibbison, Godfrey A., Tracyann L. Henry, and Jayne Perkins-Brown. "The chicken soup effect: The role of recreation and intramural participation in boosting freshman grade point average." *Economics of Education Review* 30.2 (2011): 247-257.

All research projects are in authors' edition

Contacts:

Center for Institutional Studies,

National Research University Higher School of Economics

Address: 24-3, Myasnitskaya str., Moscow, 101000, Russia

Tel. +7(495) 772-95-90 ext. 2276

Fax. +7(495) 772-95-90 ext. 2335

Email: lia@hse.ru

WWW: <http://cinst.hse.ru/en/>

<http://rssia.hse.ru>



2014