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STATE-BUSINESS RELATIONS AND PARTICIPATION OF FIRMS IN PUBLIC PROCUREMENT IN RUSSIA: AN EMPIRICAL STUDY

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Previous Studies. State-Business relations

“State capture” theory

- **Stigler, G. J. (1971). “The Theory of Economic Regulation.”**
- **Hellman, J.S., Jones, G., & Kaufman, D. (2000). “Seize the State, Seize the Day: An Empirical Analysis of State Capture and Corruption in Transition.”**
- **Slinko. I., Zhuravskaya E.V., & Yakovlev, E. (2004). “Laws for Sale: An Empirical Study of the Effects of Regulatory Capture.”**

Government support was given mainly to large, old, privatised enterprises that were inefficient but had “special relations with authorities”

“System of exchanges”

- **Frye Timothy (2002). “Capture or Exchange? Business Lobbying in Russia.”**
- **Yakovlev. A. (2011). “State-Business Relations in Russia in the 2000s: From the Capture Model to a Variety of Exchange Models?”**

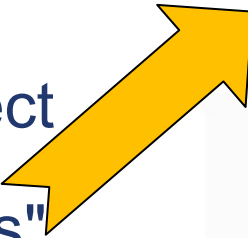
The firms that received government support faced additional costs and liabilities at the same time.



Previous Studies. Public Procurement in Russia

- **Higher School of Economics (2010). “The System of Public Procurements on the Way to a New Quality.” (HSE Policy Paper). Moscow, Russia. [Online]. Available at www.hse.ru/data/2010/02/24/1233015864/HSE-23feb.pdf**
- **Yakovlev, A., & Demidova, O. (2010). “The Reform of the System of Public Procurements and Practice of Selection of Suppliers for Public Needs in Russia in 2004 and 2008.” The HSE Economic Journal: 202-226.**

The Problem

- Crisis of 2008-2009 – the active use of public procurement abroad as a tool to support enterprises
 - In Russia - the preference for domestic manufacturers and SMEs
 - At the same time: different forms of direct support under the "system of exchanges" between the state and business
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- Can we regard them as a component in “the system of exchanges” between enterprises and authorities?
 - To what extent do public procurements are combined with measures for direct support of enterprises?
 - How such indirect support is combined with instruments of direct support of enterprises?



Monitoring the competitiveness of manufacturing enterprises conducted by Institute for Industrial and Market Studies at the NRU-HSE

Survey of 957 firms in the spring of 2009.

Sample parameters

Manufacturing firms from 8 sectors and 48 regions of Russia. The enterprises employed about 8% of the average payroll across the whole sample, and in 2007, they produced about 6% of the total output of manufacturing industries. The average surveyed enterprise had 587 employees, 75% of firms had been established before 1992 г., 10% – after 1998 г. The government held stakes of 9%, with foreign shareholders participated in 8% of the total firms in the sample, and 17% gave no answer about their ownership structure. Among our respondents, 67.5% were chief executive officers and executive managers in their companies; 31% were deputy CEOs in charge of economy and finance.



Opportunities for analysis

Special questions on public procurement and the relationship with the authorities

- Participation of the firm in the system of public procurements (41% in 2008),
- Assistance to the authorities in social development of the region (77%, while assistance of 21% of them was substantial (over 0.1% of their sales revenue),
- Receiving support from federal (13%), regional (26%) and local authorities (20%).

Other questions:

The questionnaire of our survey included questions about size of enterprises, their industry sector, the establishment, ownership, location, participation in business associations, occurrence in the business group.



Main Hypothesis

1. Public procurements as a component of the system of exchanges. In the logic of “the model of exchanges”, the firm that gives support to authorities should have preferential access to government orders.
2. Complementarity of different tools of public support.
3. Mutual substitution of different instruments of government support (Under limitation of resources at the disposal of public authorities).
4. Change in the ratios of direct and indirect tools of government support, as indicators of regional social and economic development improve.



Methodology: choice of variables

Dependent Variable State_Procure * – The enterprise provided supplies on government orders in 2008			
Independent variables		Endogenous variables	
Sector	Code of the Industry	FirmHelp*	The enterprise provided assistance to the authorities
Size	Average number of workers on payroll	FirmHelpSuf*	The enterprise provided sufficient assistance to the authorities
Foundation	Period of foundation	FRLHelp*	The enterprise received support from authorities
State_Owner	Government stake in ownership	FedHelp*	The enterprise received support from federal authorities
Foreign_Stock	Foreign stake in ownership	RegHelp*	The enterprise received support from regional authorities
Reg_Potential	Investment potential of the region	LocHelp*	The enterprise received support from local authorities
Holding (HoldingHead)	The enterprise is a member of a business group (holding company)	* Binary variables	
Association	The enterprise is a member of business association		
City_type	Type of settlement		

Restrictions

- 1) Impossible to use logit or probit models because of the presence of endogenous regressors
- 2) Impossible to use the method of instrumental variables because the endogenous variables are binary
- 3) Impossible to use a system of linear simultaneous equations because dependent and endogenous variables are binary

Bivariate probit model

$$\begin{cases} Y_1^* = X_1 \beta_1 + \alpha Y_2 + \varepsilon_1 \\ Y_2^* = X_2 \beta_2 + \varepsilon_2 \end{cases}$$

$$Y_1 = 1, \text{ if } Y_1^* > 0, \text{ else } 0$$

$$Y_2 = 1, \text{ if } Y_2^* > 0, \text{ else } 0$$

$$\varepsilon_1, \varepsilon_2 \sim N(0,0,1,1,\rho)$$



Results for the first equation

State_Procure	Model 1.1 N = 795	Model 2.1 N = 795	Model 3.1 N = 794	Model 4.1 N = 794	Model 5.1 N = 794	Model 6.1 N = 793
Sector	***	***	***	***	***	***
InSize	+***	+**	+**	+**	+**	+***
State_Owner	+***	+***	+**	+	+***	+***
Reg_Pot_High	+***	+***	+***	+***	+***	+***
Holding	_*	_*	_*	_*	_*	_*
FirmHelp	Insignificant					
FirmHelpSuf		Insignificant				
FRLHelp			Insignificant			
FedHelp				+***		
RegHelp					Insignificant	
LocHelp						_*

Results for the second equation

State_Procure	Model 1.1 N = 795	Model 2.1 N = 795	Model 3.1 N = 794	Model 4.1 N = 794	Model 5.1 N = 794	Model 6.1 N = 793
<i>Dependent variable</i>	<i>FirmHelp</i>	<i>FirmHelpSuf</i>	<i>FRLHelp</i>	<i>FedHelp</i>	<i>RegHelp</i>	<i>LocHelp</i>
Sector	***	***	***	***	***	***
InSize	+***	+*	+***	+***	+***	
Foundation			***	**		
State_Owner	_*	_*	+***	+***	+*	+*
Foreign_Stock						+***
Reg_Pot_High	_***		_***	_***	_***	_***
Holding_Head				+**		
Association	+***	+***	+***		+***	
City_type	***				***	

Checking robustness of the results, first equation

State_Procure	Model 1.2	Model 2.2	Model 3.2	Model 4.2	Model 5.2	Model 6.2
	N = 955	N = 955	N = 954	N = 954	N = 954	N = 953
Sector	***	***	***	***	***	***
InSize	+***	+***	+***	+***	+***	+***
State_Owner	+***	+***	+**	+**	+**	+***
Ownership_ No_answer	Insignificant	Insignificant	Insignificant	Insignificant	Insignificant	Insignificant
Reg_Pot_High	+***	+***	+***	+***	+***	+***
Holding	-**	-*	-**	-**	-**	-**
FirmHelp	Insignificant					
FirmHelpSuf		+*				
FRLHelp			+***			
FedHelp				+**		
RegHelp					+**	
LocHelp						Insignificant

Checking robustness of the results, second equation

<i>Dependent variable</i>	<i>FirmHelp</i>	<i>FirmHelpSuf</i>	<i>FRLHelp</i>	<i>FedHelp</i>	<i>RegHelp</i>	<i>LocHelp</i>
Sector	***	***	***	***	***	***
InSize	+***	+***	+***		+***	
Foundation			***	***	***	
State_Owner		-**	+***	+***	+**	+**
Foreign_Stock						+**
Ownership_No_answer					+*	+***
Reg_Pot_High	-***		-***	-***	-***	-***
Holding_Head				+***	+**	
Association		+***	+***		+***	+***
City_type	***	*			*	*

Conclusions

- **We cannot state that public procurements are integrated into the “system of exchanges” between the state and business . Assistance to authorities in social development of a region gives the firm no additional chances for receiving government orders.**
- **The enterprises that receive direct support from federal authorities enjoy privileges in access to public procurements.**
- **At the regional and local levels, the revealed relationships turned to be unsteady. Our results give us grounds to suggest that interaction with regional and local authorities is different for the firms that gave information about their ownership structures and those that refused to answer this question.**
- **The firms that are located in the more developed regions received government support less frequently, but at the same time, had more opportunities to get access to public procurements.**



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