

Decentralization of Firms  
in a Country with Weak Institutions:  
Evidence from Russia

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- Is successful decentralization achievable for firms that operate under weak institutions?
- If yes, under what conditions?

# Literature: Theory

- Benefits and costs of decentralization:
  - *Aghion and Tirole, 1997; Baker et al., 1999; Rajan and Zingales, 2001; Dessein, 2002; Aghion et al., 2014; et al.*
  - Potential to significantly improve efficiency of firms:
    - Better use of available information
    - Better communication
    - Quicker and more efficient decision-making
    - Higher motivation of employees
  - Agency costs:
    - Risk of misuse of delegated authority by employees
- Evidence from business:
  - *E.g. Bock, 2015 – case of Google*
  - Decentralization
    - Enhances motivation
    - Helps attract most talented people
    - Promotes innovation, ...

# Literature: Role of environment

- *Bloom et al., 2010; Bloom et al., 2012; Athanasouli and Goujard, 2015; Levina, 2017*
- Decentralization is **more** likely under
  - Higher trust, stronger rule of law
  - Higher competition
- Decentralization is **less** likely under
  - Higher corruption

# Empirical evidence

- **In developed countries:**
  - *Acemoglu et al., 2007; Kastl et al., 2013; Aghion et al., 2017*
  - Decentralized firms, on average, show better results
    - More productive
    - More innovative
    - Perform better during economic crises
- **In countries with weak institutions:**
  - Evidence is very limited
  - **Developing countries:**
    - *Bloom et al., 2010; Bloom et al., 2013*
    - Extremely high degree of centralization of firms
      - Firms are unable to successfully decentralize
  - **Post-Communist countries:**
    - Almost no evidence yet
    - *Levina, 2016*: First positive evidence from Russia

# In this paper we...

- Challenge the popular belief that decentralization cannot be successful in the environment with weak institutions
  - Explore data on Russian manufacturing firms
  - Look at investment outcomes of centralized & decentralized firms
- Pay attention to
  - Benefits decentralization can yield **to efficiency of a firm**
    - ... even in an environment with weak institutions
- Explore under what conditions can decentralization be
  - **Successful**
  - **Valuable for a firm**

... in an environment with weak institutions

# Theory

- Decentralization has a strong potential to improve efficiency of a firm
  - Motivation of employees
  - Quality of decision-making
  - Speed of reaction, etc...
- Two strategies of decentralization under weak institutions:
  - *Cautious decentralization*
    - Delegation to people hired **through connections**
      - Selected on the basis of trust, often non-professionals
    - Less risky
    - Limited potential to improve firm's efficiency
  - *Real decentralization*
    - Delegation to people hired **competitively**
      - Allows to hire highly professional and talented people
    - High agency risks
    - Huge potential to improve firm's efficiency

# Theory

- Decentralization can be valuable when efficiency is valuable
  - In a competitive market environment
    - **Economic efficiency** is an important driver of **firm's success**
  - However, in an environment with weak institutions
    - This is not always the case
- Under weak institutions:
  - Role of corruption for economic wellbeing of firms ↑
  - Firms' expected returns on being economically efficient ↓
  - Potential value of decentralization ↓



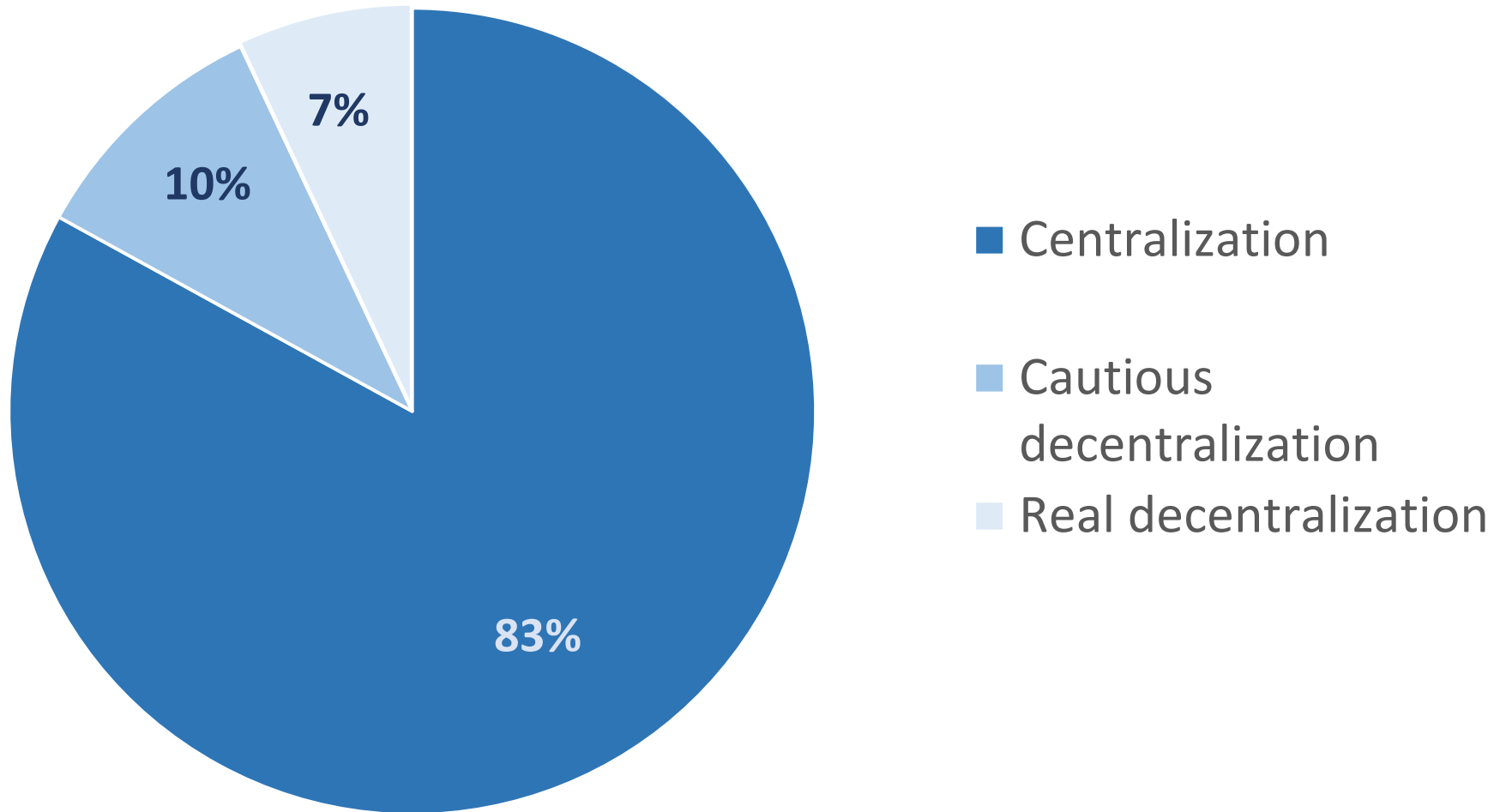
# Theory

- Hypothesis 1: Real decentralization can have economic pay off for firms even in an environment with weak institutions
- Hypothesis 2: The higher the role of corruption for firms' economic success, the lower the firms' returns on real decentralization

# Data

- Russian Firms in a Global Economy (RuFIGE) survey
  - Institute for Industrial and Market Studies (IIMS) HSE, 2014
  - 1950 manufacturing firms from 60 Russian regions
  - Sample is representative at the country level
  - Unique combination of questions about
    - Decentralization
    - Strategies of hiring for top positions
- Business Environment and Enterprise Performance Survey (BEEPS)
  - World Bank & EBRD, 2012
  - 37 Russian regions
  - Representative at the regional level (about 120 firms per region)
  - Covers 80% of RuFIGE sample (35 regions)

# Firms' decentralization strategies



# Empirical analysis

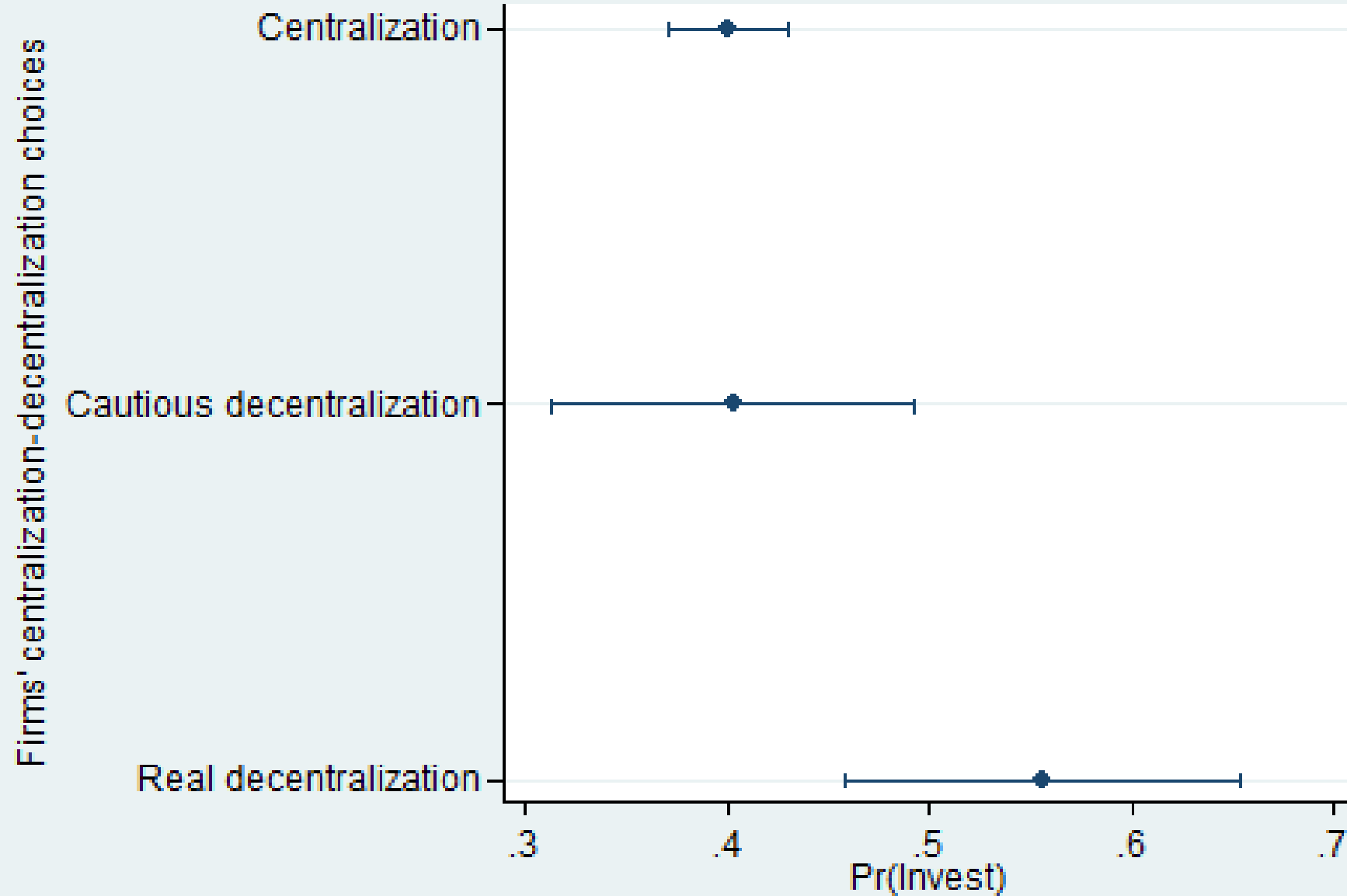
Hypothesis 1: Real decentralization can have economic pay off for firms even in an environment with weak institutions

$$(1) P\{Invest_i\} = \varphi(\beta_1 Cautious\_Decentr_i + \beta_2 Real\_Decentr_i + \beta_3 Firm\_Controls_i)$$

- Dependent variable – Dummy for investment
  - Firms' financial performance data is unreliable!
- *Firm\_Controls<sub>i</sub>* include:
  - firm's size, sector & regional dummies
  - property structure, belonging to a holding, recent change of main shareholders
  - support from state, receipt of state orders
  - type of locality (city / town / village), position of the respondent
  - revenue, dummy for non-response to question about revenue

	(1)	(2)	(3)	(4)	(5)
	<b>Firm implements investment</b>				
<b>Firm is cautiously decentralized</b>	<b>-0.074</b> (0.137)	<b>-0.020</b> (0.142)	<b>-0.020</b> (0.152)	<b>0.010</b> (0.153)	<b>-0.310</b> (0.190)
<b>Firm is really decentralized</b>	<b>0.451***</b> (0.145)	<b>0.448***</b> (0.149)	<b>0.446***</b> (0.159)	<b>0.479***</b> (0.159)	<b>0.594***</b> (0.230)
Employment at the firm, log	0.300*** (0.034)	0.286*** (0.037)	0.326*** (0.040)	0.267*** (0.043)	0.213*** (0.065)
Log revenue*				0.130*** (0.040)	
Non-response to question about revenue				0.002 (0.167)	
Log revenue					0.163*** (0.050)
Control for property structure, belonging to a holding, recent change of shareholders		Yes	Yes	Yes	Yes
Control for support from government or receipt of state orders, type of locality, position of the respondent			Yes	Yes	Yes
Control for sector and region	Yes	Yes	Yes	Yes	Yes
Observations	1,734	1,658	1,602	1,602	883
Pseudo R-squared	0.139	0.141	0.159	0.181	0.210

### Predictive Margins with 95% CIs



# Empirical analysis

Hypothesis 2: The higher the role of corruption for firms' economic success, the lower the firms' returns on real decentralization

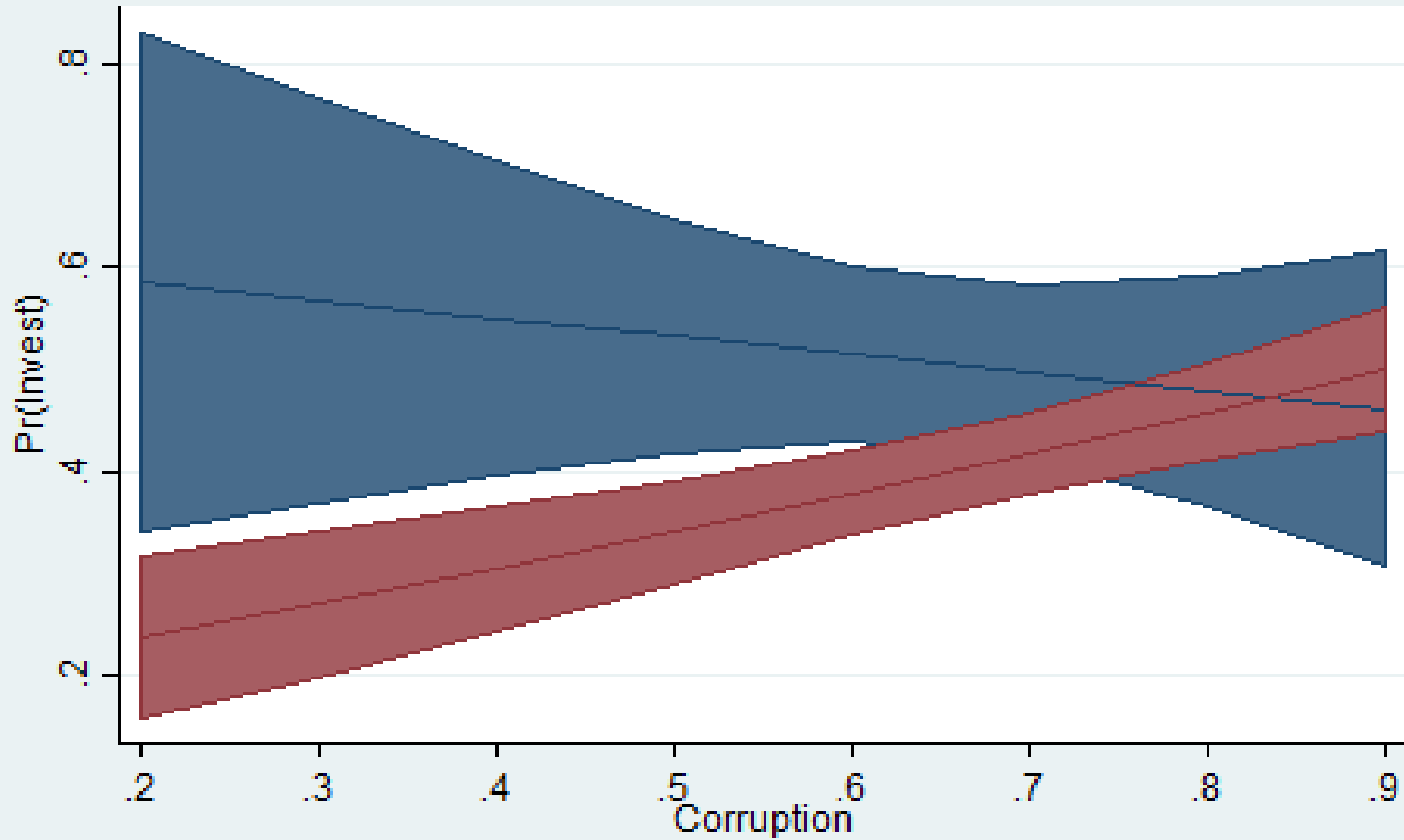
$$(2) P\{Invest_{ij}\} = \varphi(\beta_1 Real\_Decentr_{ij} + \beta_2 Corruption_j + \\ + \beta_3 Real\_Decentr_{ij} \cdot Corruption_j + \\ + \beta_4 Regional\_Controls_j + \beta_5 Firm\_Controls_{ij})$$

- *Corruption<sub>j</sub>* – share of firms that perceive corruption to be an obstacle
  - Other corruption variables for robustness
- *Regional\_Controls<sub>ij</sub>* include:
  - GRP, GRP growth
  - Richness in natural resources
  - Share of population with higher educations
  - Quality of judicial system, et al.
- Robust standard errors clustered at the level of region

	(1)	(2)	(3)	(4)	(5)
	<b>Firm implements investment</b>				
<b>Firm is really decentralized</b>	<b>1.336***</b> (0.506)	<b>1.329***</b> (0.507)	<b>1.339***</b> (0.520)	<b>1.339**</b> (0.520)	<b>1.400***</b> (0.530)
<b>(Firm is really decentralized) * (Corruption in the region)</b>	<b>-1.601**</b> (0.721)	<b>-1.592**</b> (0.725)	<b>-1.592**</b> (0.747)	<b>-1.592**</b> (0.752)	<b>-1.673**</b> (0.766)
Corruption in the region	1.086*** (0.327)	1.156*** (0.294)	1.253*** (0.288)	1.253*** (0.284)	1.167*** (0.299)
GRP, log	-0.127** (0.056)	-0.123** (0.056)	-0.122** (0.057)	-0.122** (0.059)	-0.093 (0.073)
Regional richness in natural resources		0.004 (0.008)	0.004 (0.008)	0.004 (0.009)	0.003 (0.008)
Share of regional population with higher education			-0.274 (0.252)	-0.274 (0.252)	-0.269 (0.249)
GRP growth				-0.001 (1.429)	-0.296 (1.478)
Quality of judicial system in the region					0.493 (0.716)
Firm-level controls (employment, sector and region, revenue*, property structure, belonging to a holding, recent change of shareholders, state support, state orders, type of locality, position of the respondent)	Yes	Yes	Yes	Yes	Yes
Observations	1,261	1,261	1,250	1,250	1,250
Pseudo R-squared	0.119	0.120	0.121	0.121	0.122



Predictive Margins with 95% CIs



— Really decentralized firms — Other firms

# Conclusion

- This is one of the very first papers
  - That presents **empirical evidence** on the **opportunities for successful decentralization of firms**
    - Even in an environment with weak institutions
  - Russian firms that are decentralized and hire for top positions competitively
    - On average are more likely to invest
    - Yet, the higher corruption, the lower returns on *real decentralization*
- Important:
  - This is only on average
  - We do not know about the firms that tried to decentralize
    - And were unsuccessful
    - Cancelled decentralization attempts
    - Or left the market
  - Yet, successful decentralization under weak institutions is possible

## ... for future research

- Russian institutional climate
  - ... is far from being good
- Successful decentralization of firms should require
  - At least some level of trust and some quality of norms
  - At least within firms
- Open questions:
  - Do successfully decentralized firms manage to build some special micro-climate
    - With higher-than-average trust and better-than-average norms?
  - How do they manage to do this?
  - Can this effect spread beyond these firms
    - And contribute to improvement of trust and norms at the level of
      - Locality?
      - Region or country?

**Thank you!**

# The decentralization question

- “With reference to strategic decisions which of the following statements better describes your firm’s situation?
  1. Decisions in your firm are **centralized**: the CEO/owner takes most decisions in every area
  2. Decisions in your firm are **decentralized**: managers can take autonomous decisions in some business areas”
- Soft definition of decentralization

# The corruption question

- “To what degree is corruption an obstacle to current operations of your establishment?”
  - No obstacle
  - Minor obstacle
  - Moderate obstacle
  - Major obstacle
  - Very severe obstacle”
- Share of firms that perceive corruption to be an obstacle

