

SOEs in Russia

Employment Practices, Labor Markets,
and Firm Performance

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Objective & Approach

Our objective

1. Support reform agenda in challenging area
2. Aligned with National Project on labor productivity and National Goal of boosting overall productivity of economy

Our approach

- ✓ Labor angle
- ✓ Focus SOE employment practices (compensation and management)
- ✓ Russian sources and collaboration with Higher School of Economics
- ✓ Possible impact of state support & levers for reform

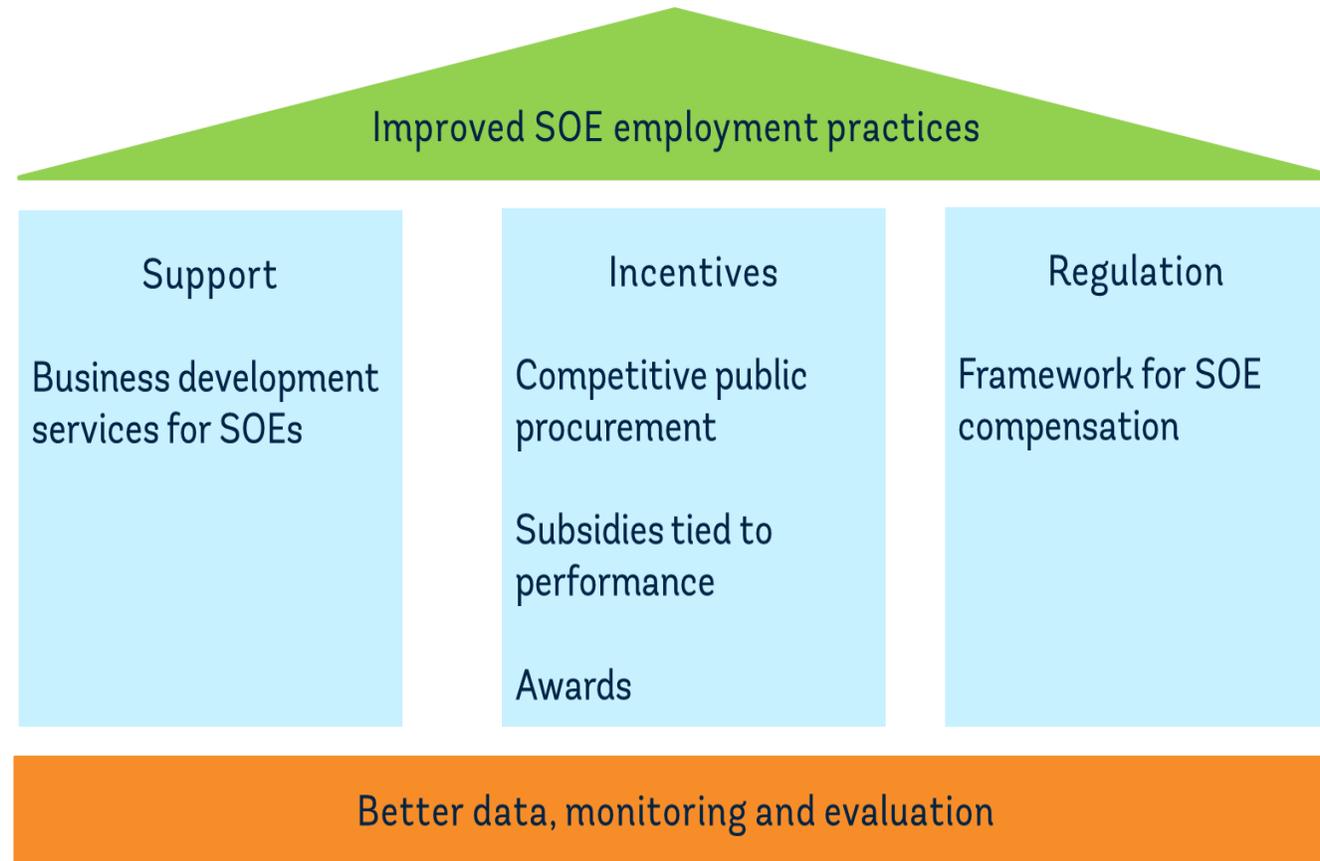


Preview: Main findings

- ✓ **SOE sector is diverse and large** but some data gaps
- ✓ **SOEs have an overall compensation premium**, evidence of **labor misallocation** (hurts productivity), but there's heterogeneity
- ✓ **SOEs' management practices are generally weaker** than those of domestic and international private firms, suggesting weaker firm capabilities and drag on overall productivity
- ✓ **Small-medium size SOEs** are main source of distortions and performance weakness
- ✓ **Government policy** enables observed employment practices – and rethinking current policy will be key to raising productivity

Preview: Policy recommendations

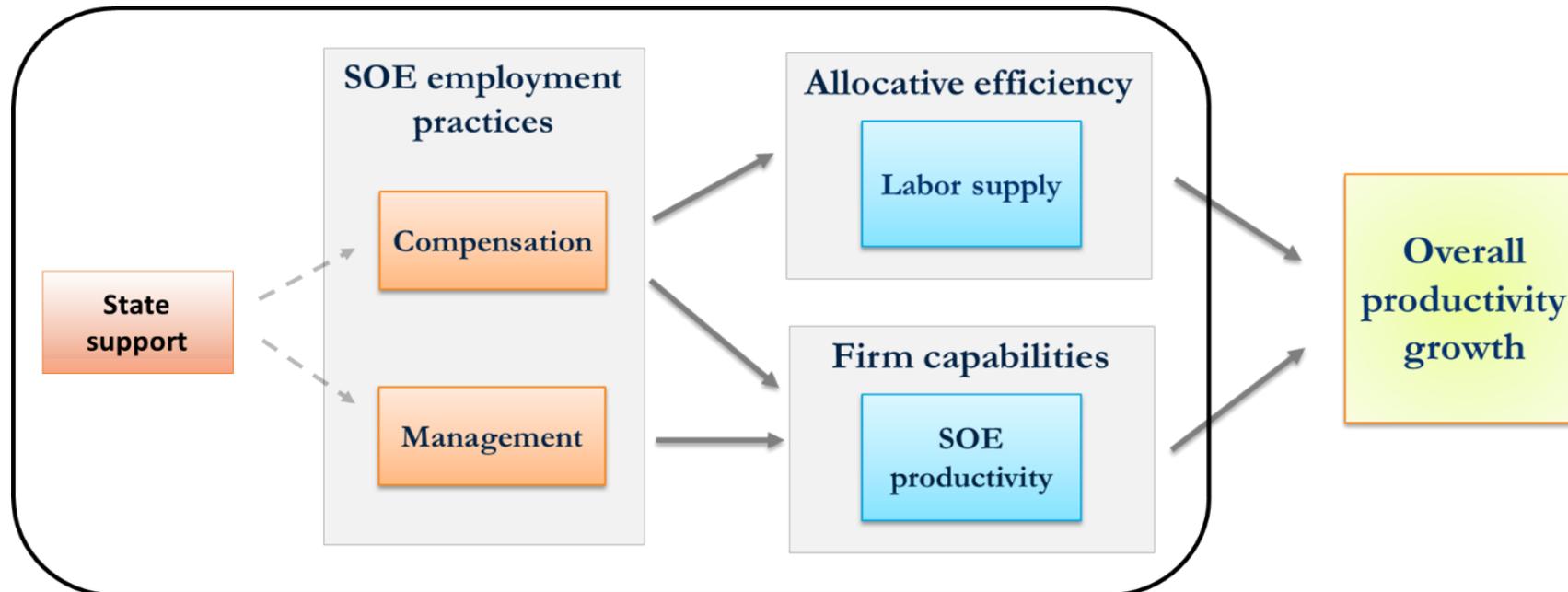
Boosting SOE sector's contribution to productivity growth



Theoretical motivation

Economic theory

- employment practices of economic actors (esp large ones like SOEs) affect a country's productivity
- key channels: efficient allocation of labor and internal firm capabilities
- state policy can shape practices (incentives)



Drawing on Cirera & Maloney (2017) and Grover, Medvedev, & Olafsen (2018)

Main findings – SOE sector characteristics (1)

Fully State
Direct Ownership

State share 100%

Mixed
Direct ownership

State share <100% & > 0%

Mixed
Indirect ownership

Indirect state share >25%

Subsidiaries of SOEs

Rosstat classifies as private companies

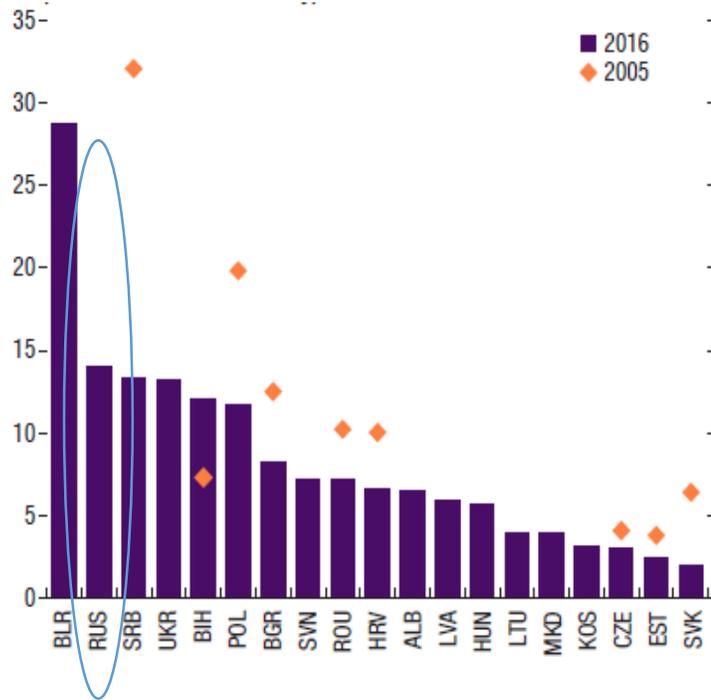
~32,500 companies with direct state ownership
(IMF 2018)

Over 20,000 companies with indirect state ownership
(Russian Railroads alone has ~20,000 subsidiaries)

Main findings – SOE sector characteristics (2)

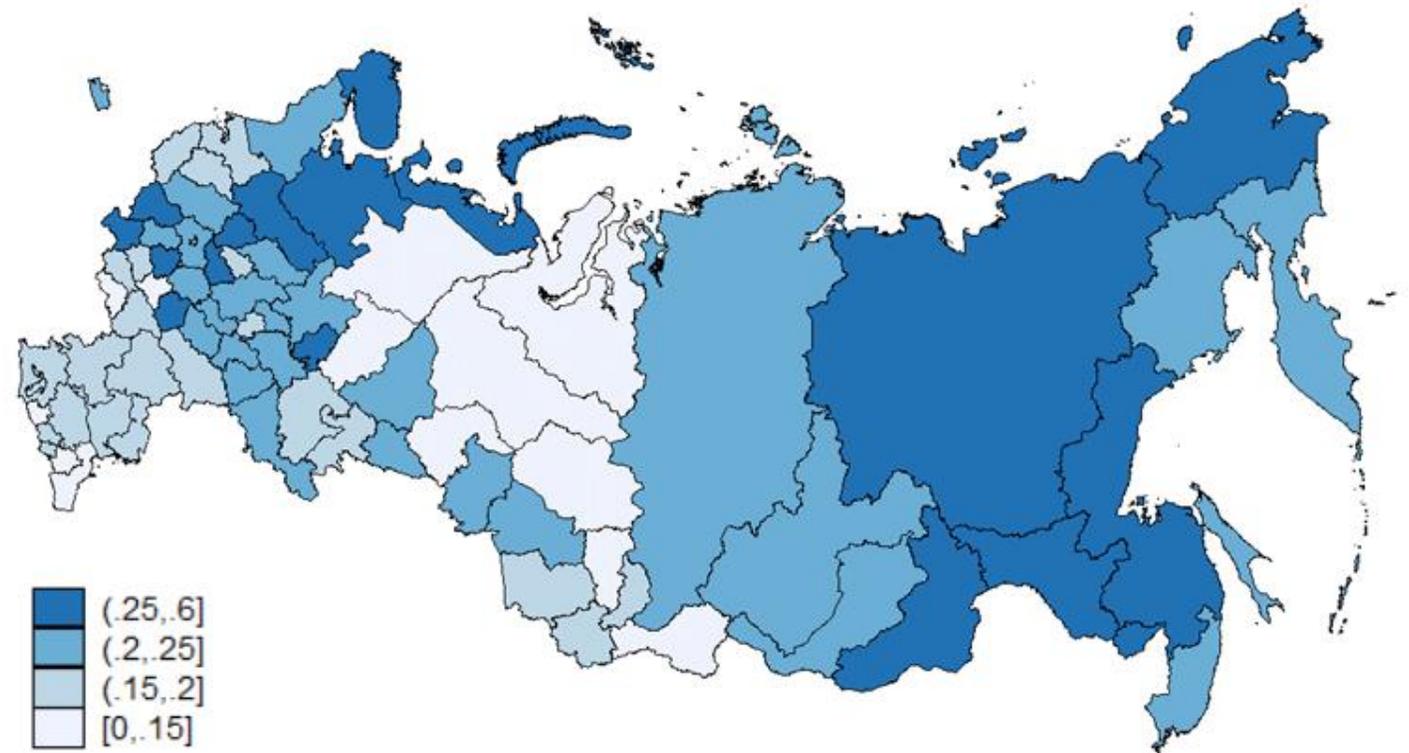
SOE sector is large and diverse

SOE share in total employment is high by intl standards



Source: IMF 2019

... but significant variation by region



SOE share in total employment
Source: RLMS

Main findings – SOE sector characteristics (3)

SOE sector is large and diverse

Variation in employment by industry sector

Market sector	Share (RLMS)	Share of SOE empl	
		OECD	China
Agriculture & fishing	20%		
Mining	7%	6%	29%
Manufacturing	23%	9%	18%
Utilities	30%	47%	9%
Construction	11%		
Wholesale-retail trade, restaur.	11%		
ICT	43%	4%	6%
Transport	43%	19%	12%
Finance	44%	8%	11%
Real estate & Business services	44%		
Total	16%		

... and firm size (number of employees)

- Average SOE is 3.5X larger than average private firm
- ... but $\frac{3}{4}$ of **SOEs** are **SMEs**

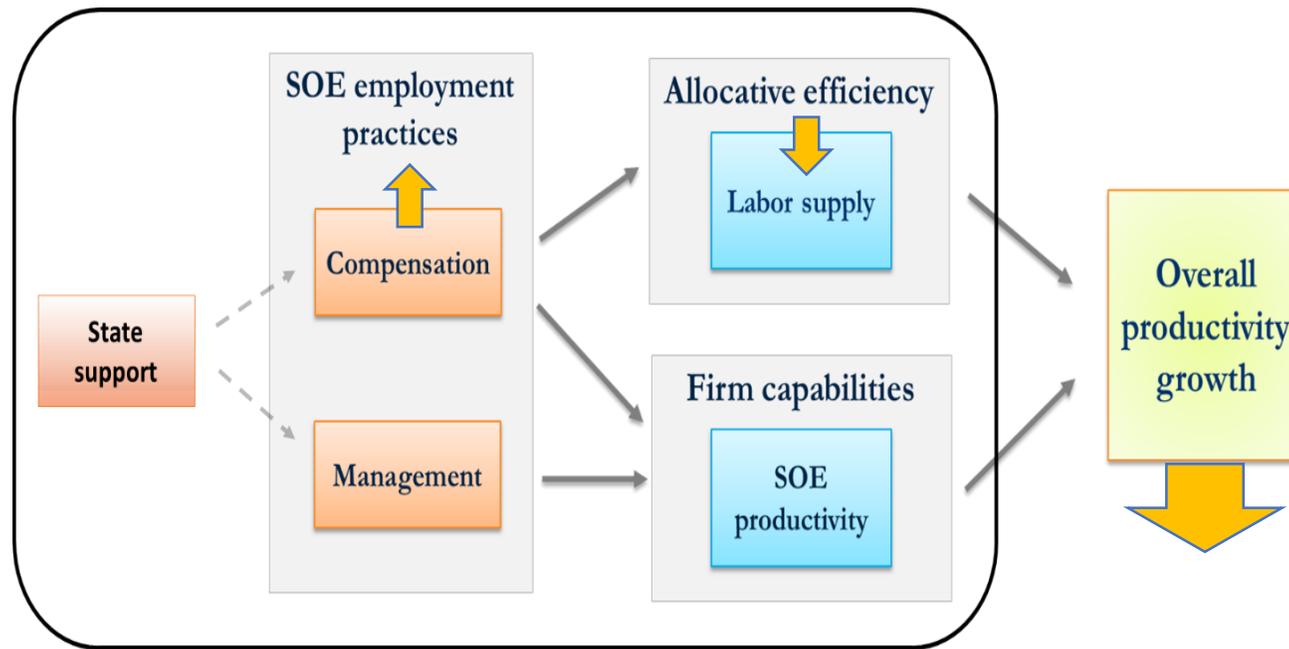
Firm size	% firms
Large (500+)	24.5%
Medium-large (250-499)	25.8%
Medium (100-249)	23.1%
Small-micro (1-99)	26.6%

Source: IIELM firm survey 2017

Source: IMF 2019

Main findings – SOE compensation (1)

SOEs (most likely) have an overall compensation premium which contributes to skill shortages in the private sector and leads to labor misallocation, but there's heterogeneity

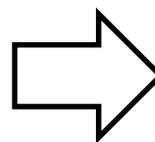


- **SOE-private wage gap** varies by region, firm size, industry
- SOEs pay significantly **higher non-wage benefits** and (most likely) **total compensation**
- Compensation differential seems to drive **inefficient labor allocation, which reduces productivity**

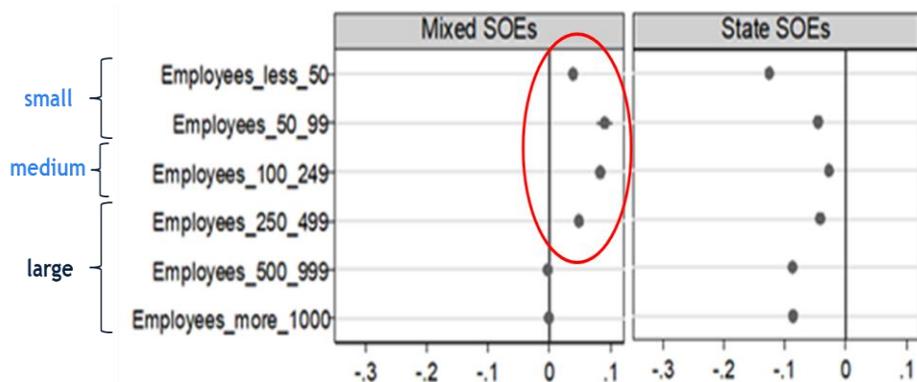
Main findings – SOE compensation (2)

Wage premia vary by SOE type and size, region, industry

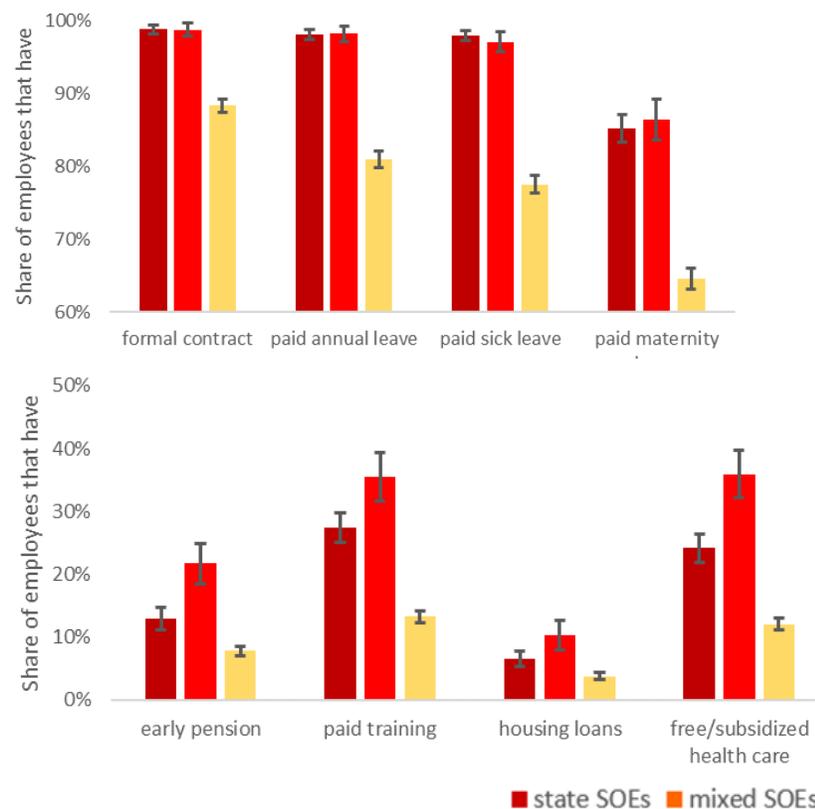
→ positive/high for mixed companies, small-medium SOEs, competitive industries



... but non-wage benefits are significantly higher for all types of SOE, and calculations suggest these outweigh any wage penalties



Source: Survey of Wages (SOW)



Source: WB staff calculations based on RLMS, latest available

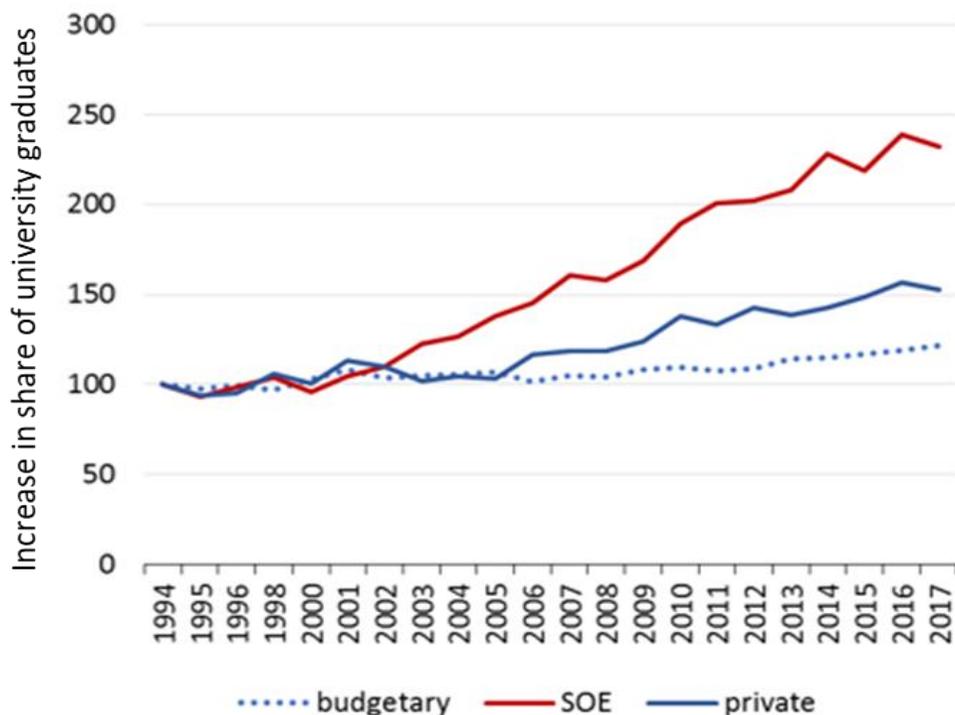
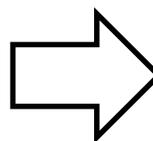
Wage gap positive for all SOEs (incl. 100% state-owned) in competitive industries eg. construction, real-estate, trade

Main findings – SOE compensation (3)

Compensation differential potentially explains skewed **job preferences** and **allocation of labor** towards SOE sector

This is inefficient and reduces overall productivity, because private firms are more productive overall

Growth in share of skilled workers (baseline 1994)



Source: RLMS

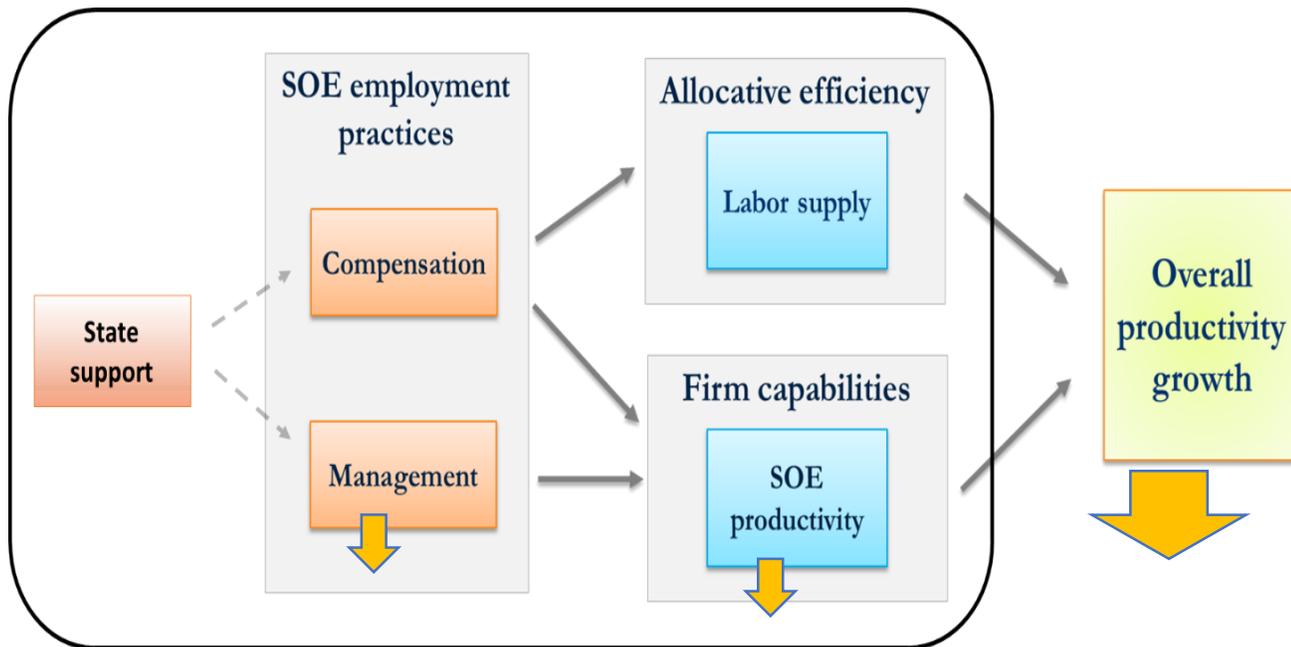
Firm size	Labor productivity Revenue per employee	Efficiency Return on Capital
Small/micro (1-100)	54% ***	136% ***
Medium (101-250)	13% ***	98% **
Medium-large (251-500)	3%	64%
Large (>500)	-7%	37

Source: Ruslana 2018 (revenue per worker), IIELM 2017 (return on capital)

Allocative inefficiency driven by SMEs: highest private-SOE productivity/efficiency gap and most severe skill shortages in private

Main findings – SOE management (1)

SOE management practices generally lag behind domestic and international private comparators, suggesting weak firm capabilities and drag on overall productivity, but there's heterogeneity

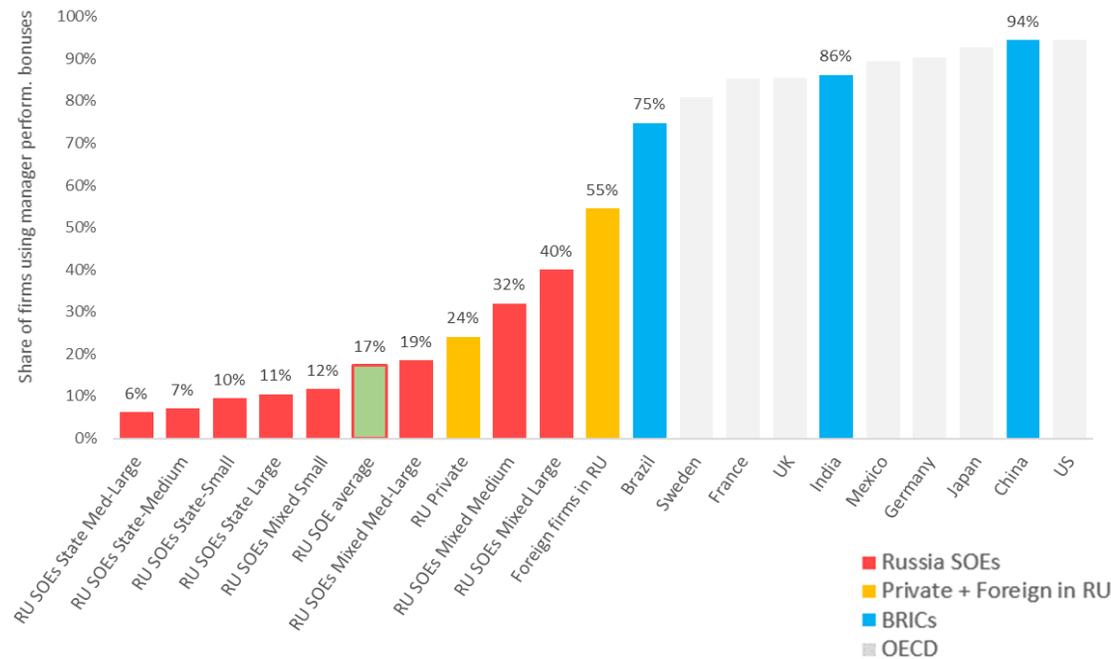


- All SOEs underperform on a number of key management dimensions
- **Small-medium sized SOEs** are worst performers
- **Many examples of good management practices**, esp among large companies

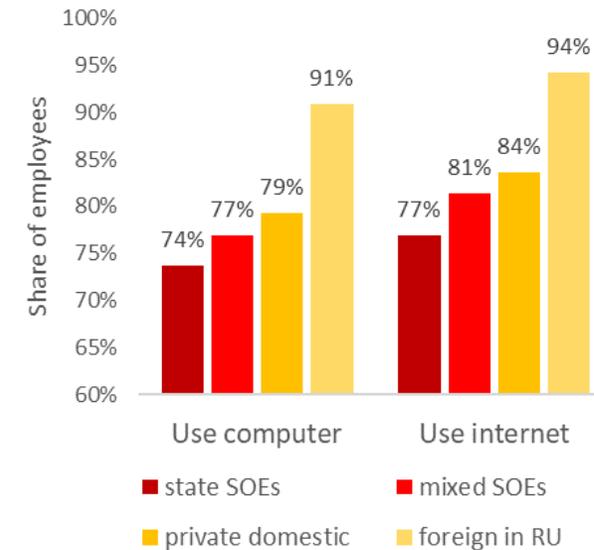
Main findings – SOE management (2)

All SOEs underperform on adoption of key management practices such as performance focus and incentives, digital technology

Share of firms that report giving managers performance bonuses



Workers' computer and internet usage



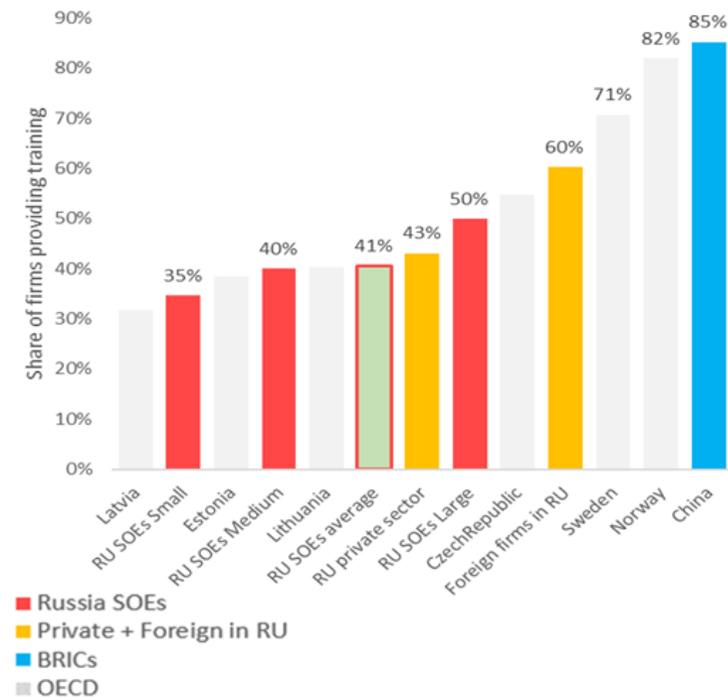
Sources: LIRT 2017 (Russian firms), WMS2014 (global comparators)

Source (computers/internet): RLMS 2017

Main findings – SOE management (3)

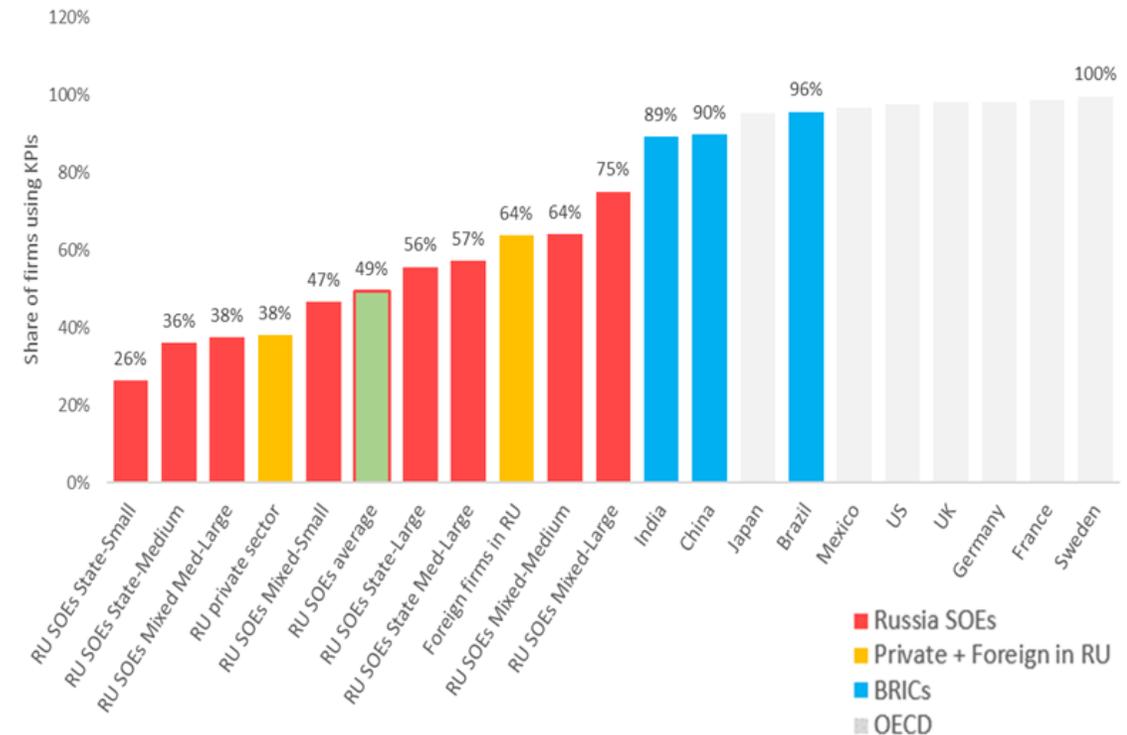
Small-medium sized SOEs are worst performers, lagging even where large SOEs do quite well eg. training, KPIs, marketing. Numerous examples of reform/good practices among **large SOEs** eg Aeroflot, Russian Railways

Share of firms providing training



Sources: Rufige 2014 (Russian firms), Enterprise surveys 2012-2017 (comparators)

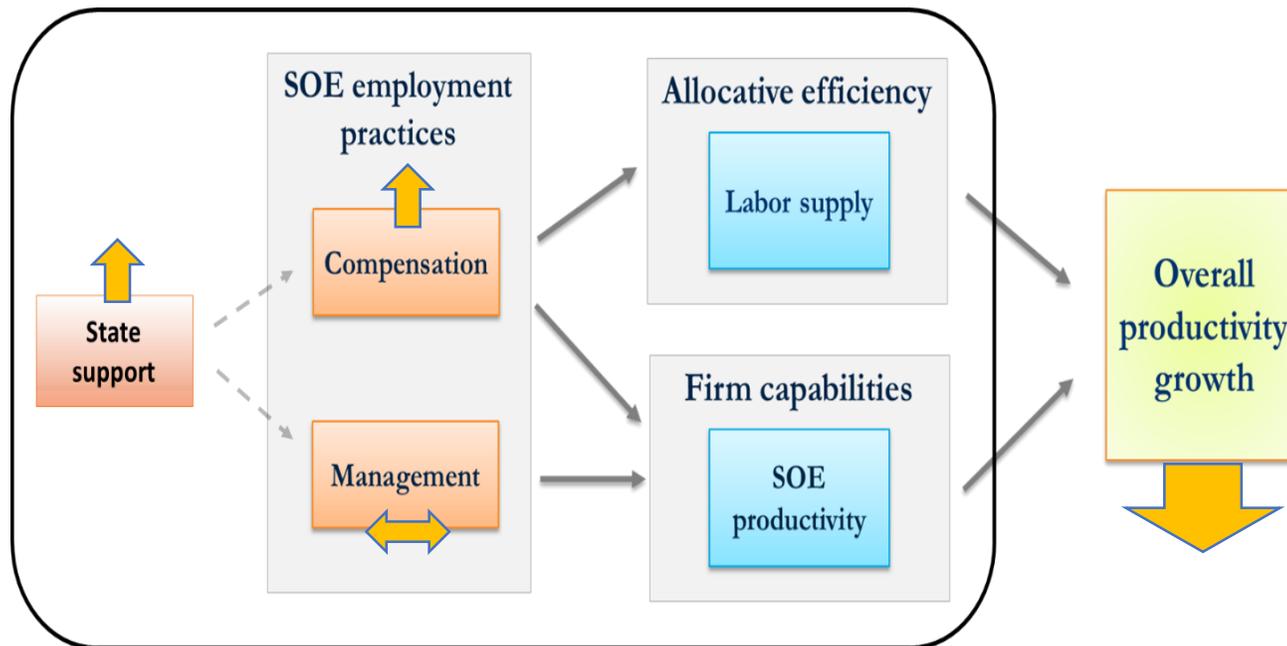
Share of firms that report using KPIs



Sources: IIELM 2017 (Russian firms), WMS2014 (global comparators)

Main findings – State support (1)

Government support enables /sustains observed employment practices – and rethinking current policy will be key to raising productivity



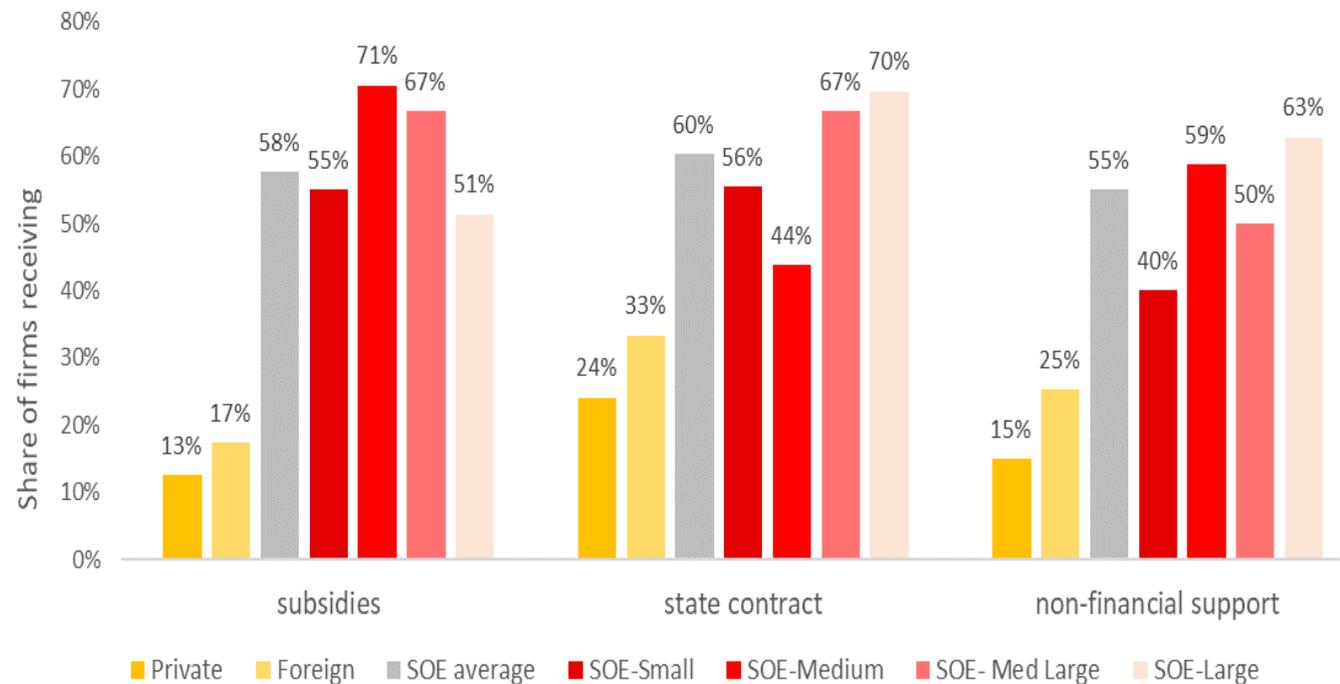
- SOEs receive **more support from the state**
- State support may be **subsidizing SOEs' compensation premia** that hurt the productivity of private firms
- State support is not structured to maximize SOE productivity

Main findings – State support (2)

SOEs are more likely to benefit from financial and non-financial* state support, and to be shielded from competition

*Non financial support includes “facilitation by federal, regional, or local authorities of connections to Russian or international partners, help attracting investors”

Share of firms receiving financial & non-financial state support



Source: IIELM 2017

Main findings – State support (3)

State support may be **enabling small-medium sized commercial SOEs to pay compensation premia** that hurt the productivity of private firms

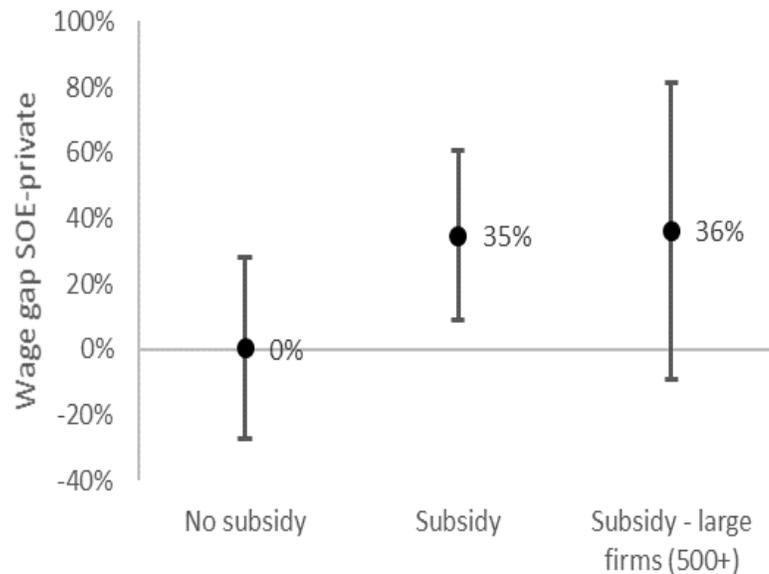
State support to commercial SOEs is **not structured to incentivize productivity**

- Subsidy allocation uncorrelated with productivity - *de facto* unconditional
- State support uncorrelated with improved management practices (need panel data to confirm)
- Single-source gvt contracts more than twice as likely to be awarded to SOEs more than private firms

-> Reduces incentive for productivity

-> At stake: value for money as well as broader productivity

-> Contrast to GoR policy towards private firms: subsidies strongly correlated with productivity and efficiency – can serve as model for SOEs



Source: RuFiGE

Note: data for manufacturing sector

Variation in SOE employment practices - Silver lining?

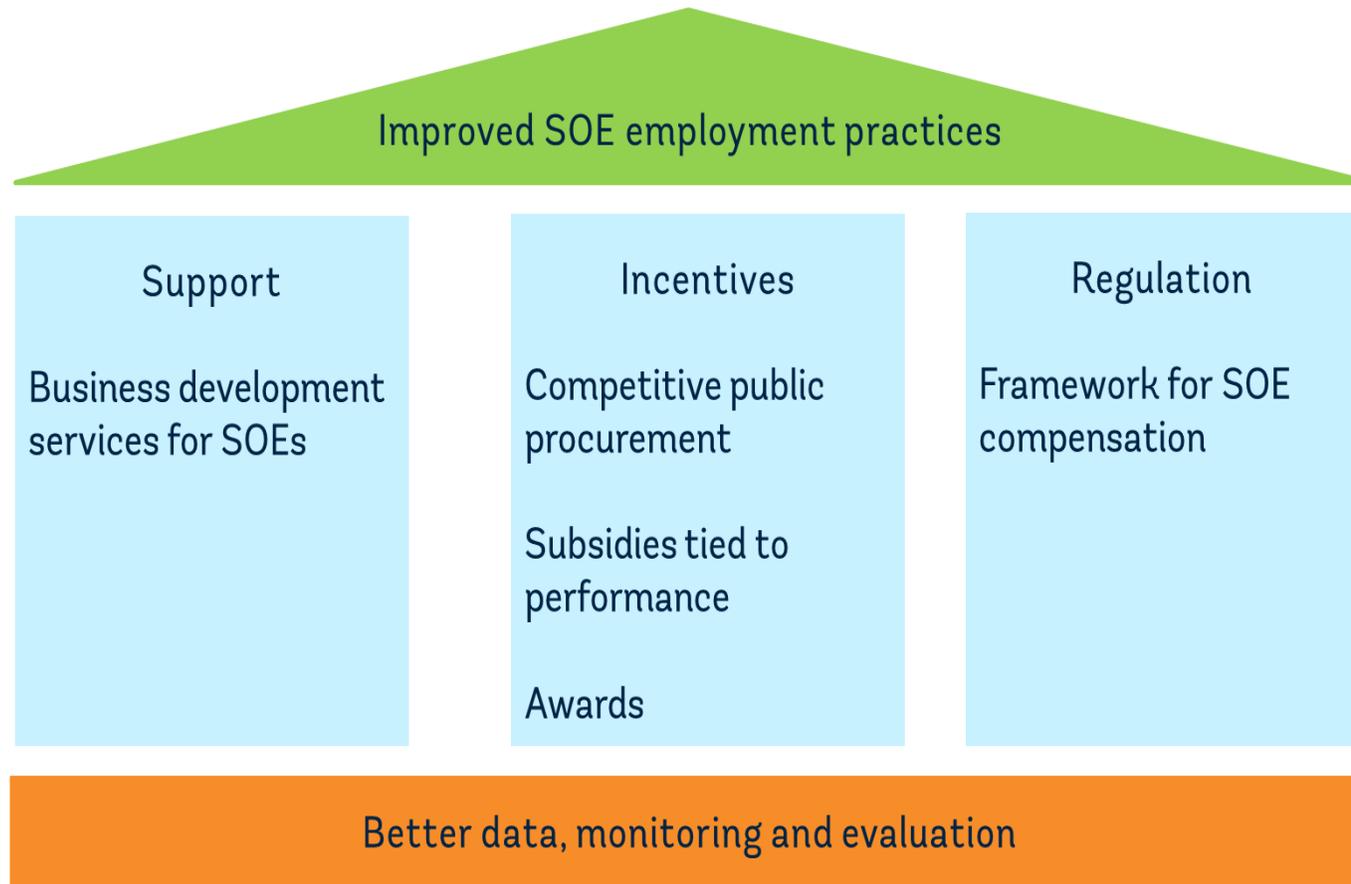
Variation in SOE employment practices and performance points to possible approaches to reform:

- ✓ government ownership is not inherently inefficient – large SOEs on par with domestic private firms, although both have room to raise productivity to catch up with international comparators
- ✓ biggest challenge is with small-medium sized SOEs
 - ✓ fully state-owned co's - weakest management practices
 - ✓ mixed co's - most distortionary compensation practices
- ✓ room for laggard SOEs to learn from domestic, better performing peers
- ✓ raising SOE sector productivity and positive spillovers is a global challenge, and if Russia is able to make progress it can provide a model for other countries



Changing policy towards SOEs

Boosting SOE sector's contribution to productivity growth



Extra slides

Policy motivation

Relevant to GoR agenda to boost productivity

- National Project on Labor Productivity 2018-2024
- National Plan for Competition Development 2018-2019
- Presidential Decree No. 193, 29 Apr 2019 (regional KPIs)
- Presidential Decree No 618, 21 Dec 2017 (Competition Policy Guidelines)
- Government Decree No 227-R, 8 Feb. 2017 reducing state share in JSCs
- 2012-2015 Government Decree 12-50R (Raising Productivity of Companies)
- Presidential Decree No Pr-307 of 2011, Innovative Russia 2020 Strategy

New area of research interest at Russian academic institutions

- Active research programs on SOE productivity and impact at Analytical Center for the Government, HSE, RANEPA, Russian Central Bank



Data & Method

Major data gaps: 2016 SCD, IMF SOE reports excluded Russia, Russian studies sample-based

An opportunity to create an evidence base

Russian sources, mix of surveys & “big” data

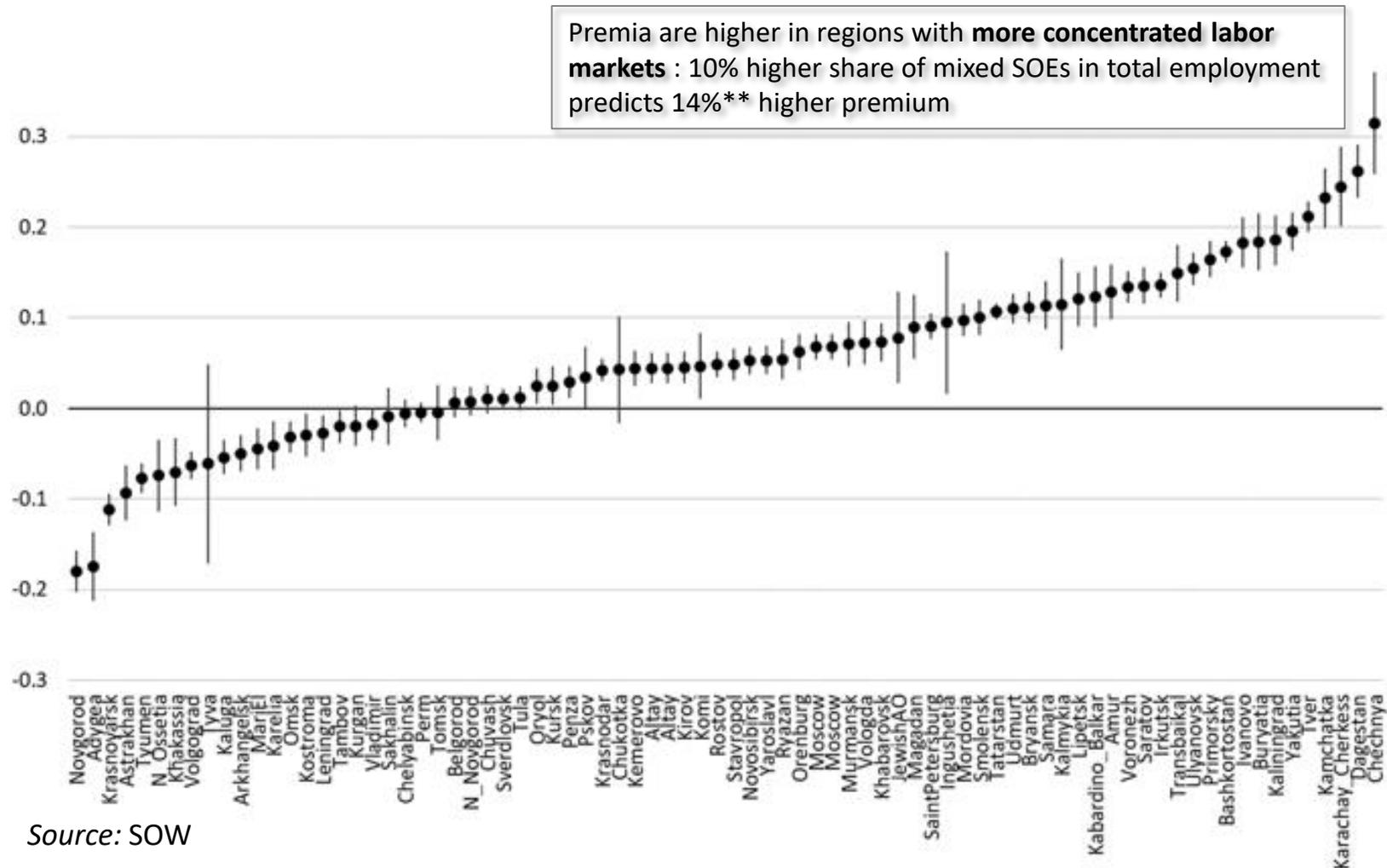
- RLMS (HSE), annual panel 2000-2017, ~10000 individuals, may partially capture indirect ownership;
- SOW (Rosstat), bi-annual cross-section 2005-2015, 700K workers in medium-large firms (excl. finance & agriculture), direct ownership only, wage information from firms' payroll;
- IIELM (HSE), annual cross-section 2009-2017, 1500-2000 firms, direct & indirect owner (matched with Ruslana);
- RuFiGE (HSE), 2014 (latest), 1500-2000 firms, direct ownership only;
- Ruslana, quarterly 2013-2018, ~10 mill firms, administrative “big data” (financial/tax records).

Local collaboration

- Russia's premier economics research institution, HSE

Main findings – SOE compensation

Regional variation in average mixed SOE wage premium

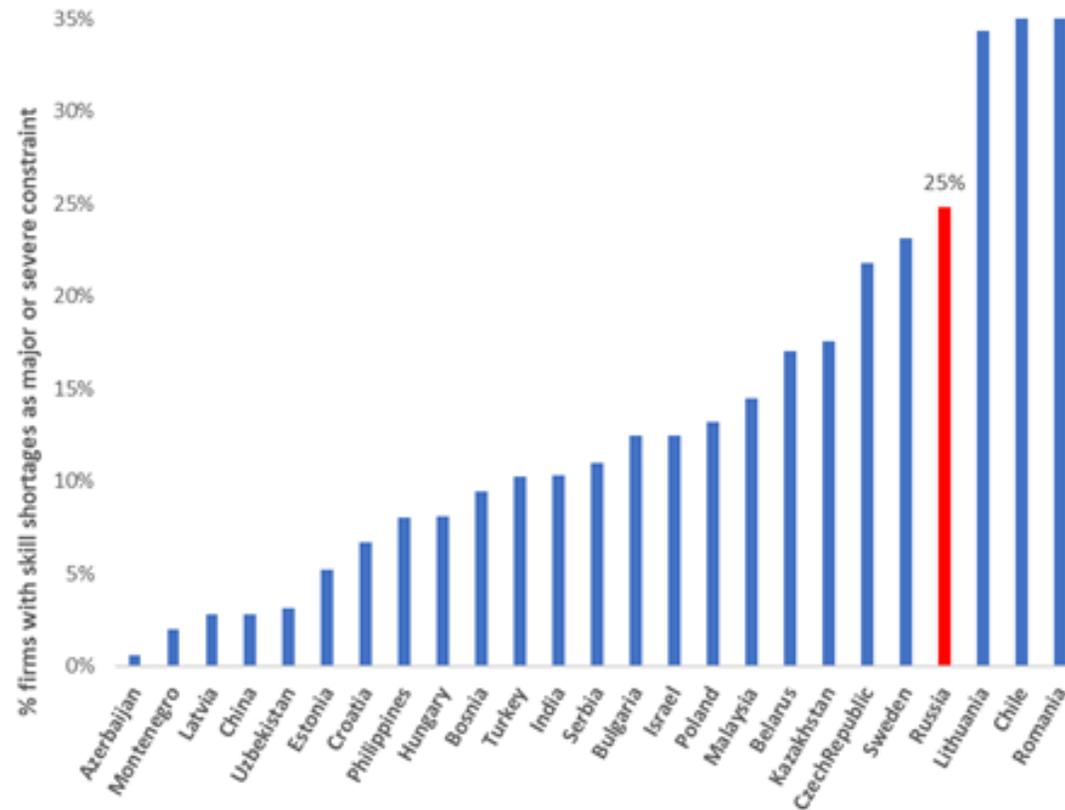


Source: SOW

Main findings – SOE compensation

Russia's tight labor market

Share of all firms with major/severe skill shortages



Source: Latest Enterprise Surveys (2012-3 Russia, 2012-7 other)

Management practices – pockets of “positive deviance”

Aeroflot

- Since 2007 introduced new management practices, apt of “innovation managers.”
- New measurable KPIs
- Better communication between employees and managers, on challenges with existing practices
- Reengineered processes to reduce bureaucratic bottlenecks
- Outcome – measurable improvement in passenger rating of Aeroflot service quality the

Russian Railways (world’s largest transport company)

- Since 2010 changes to management practices, incl. a new corporate management system
- New measurable KPIs including on service reliability, security, and quality of service
- Financial information management system
- Innovation in management systems
- Outcome - improved financial indicators and customer perceptions of service

Sources: Gershman & Thurner 2014, 2016