SOEs in Russia
Employment Practices, Labor Markets, and Firm Performance

Zahid Hasnain
Anya Vodopyanov

November 2019
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
✓ 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
Boosting SOE sector’s contribution to productivity growth

- Support Business development services for SOEs
- Incentives Competitive public procurement
  Subsidies tied to performance
  Awards
- Regulation Framework for SOE compensation

Better data, monitoring and evaluation
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)

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully State Direct Ownership</td>
<td>State share 100%</td>
</tr>
<tr>
<td></td>
<td>~32,500 companies with direct state ownership</td>
</tr>
<tr>
<td></td>
<td>(IMF 2018)</td>
</tr>
<tr>
<td>Mixed Direct Ownership</td>
<td>State share &lt;100% &amp; &gt; 0%</td>
</tr>
<tr>
<td>Mixed Indirect Ownership</td>
<td>Indirect state share &gt;25%</td>
</tr>
<tr>
<td></td>
<td>Subsidiaries of SOEs</td>
</tr>
<tr>
<td></td>
<td>Rosstat classifies as private companies</td>
</tr>
<tr>
<td></td>
<td>Over 20,000 companies with indirect state ownership</td>
</tr>
<tr>
<td></td>
<td>(Russian Railroads alone has ~20,000 subsidiaries)</td>
</tr>
</tbody>
</table>
Main findings – SOE sector characteristics (2)

SOE sector is large and diverse

SOE share in total employment is high by intl standards

... but significant variation by region

Source: IMF 2019

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 … and firm size (number of employees)

- Average SOE is 3.5X larger than average private firm
- … but ¾ of SOEs are SMEs

<table>
<thead>
<tr>
<th>Market sector</th>
<th>Share (RLMS)</th>
<th>Share of SOE emp</th>
<th>OECD</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture &amp; fishing</td>
<td>20%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mining</td>
<td>7%</td>
<td>6%</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>23%</td>
<td>9%</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>30%</td>
<td>47%</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>11%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesale-retail trade, restaur.</td>
<td>11%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICT</td>
<td>43%</td>
<td>4%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td>19%</td>
<td>12%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>44%</td>
<td>8%</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Real estate &amp; Business services</td>
<td>44%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16%</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

% firms

- Large (500+)
- Medium-large (250-499)
- Medium (100-249)
- Small-micro (1-99)

Source: IMF 2019

Source: IIELM firm survey 2017
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

---

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

*Source: Survey of Wages (SOW)*

*Source: WB staff calculations based on RLMS, latest available*
Main findings – SOE compensation (3)

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

Growth in share of skilled workers (baseline 1994)

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

<table>
<thead>
<tr>
<th>Firm size</th>
<th>Labor productivity</th>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Revenue per employee</td>
<td>Return on Capital</td>
</tr>
<tr>
<td>Small/micro (1-100)</td>
<td>54%***</td>
<td>136% ***</td>
</tr>
<tr>
<td>Medium (101-250)</td>
<td>13%***</td>
<td>98%**</td>
</tr>
<tr>
<td>Medium-large (251-500)</td>
<td>3%</td>
<td>64%</td>
</tr>
<tr>
<td>Large (&gt;500)</td>
<td>-7%</td>
<td>37%</td>
</tr>
</tbody>
</table>

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.

Source: RLMS
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
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**

**Share of firms that report using KPIs**

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

*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
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”

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 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

Improved SOE employment practices

Support
Business development services for SOEs

Incentives
Competitive public procurement
Subsidies tied to performance
Awards

Regulation
Framework for SOE compensation

Better data, monitoring and evaluation
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
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
Regional variation in average mixed SOE wage premium

Premia are higher in regions with more concentrated labor markets: 10% higher share of mixed SOEs in total employment predicts 14%** higher premium.

Source: SOW
Russia’s tight labor market

Share of all firms with major/severe skill shortages

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

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