

Diversifying Russia

Simon Commander

Altura Partners, IE Business School & EBRD

&

Alexander Plekhanov

EBRD

Context:

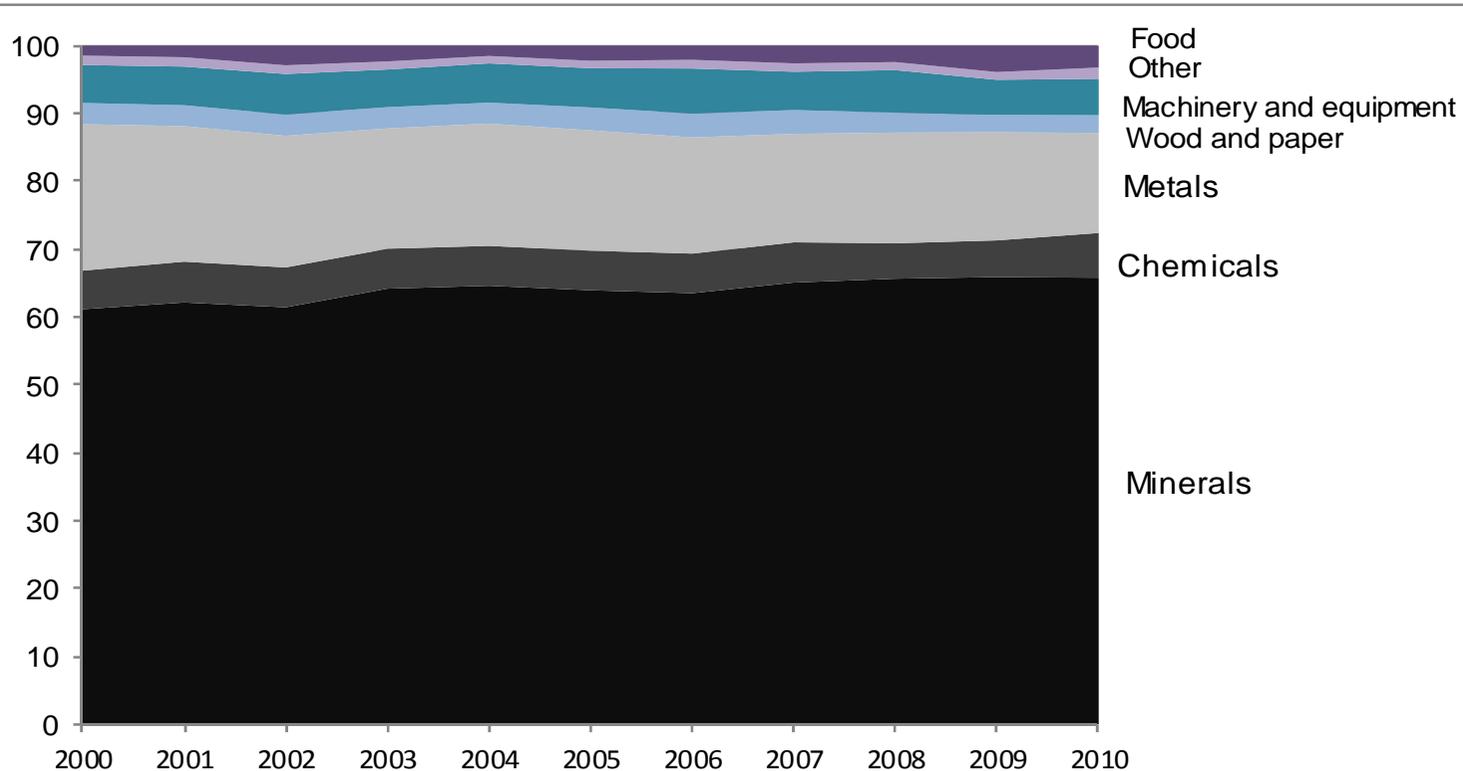
Natural resources still dominate

- Policy mantra of last decade - diversify and modernise! Yet;
- Oil & Gas went from 5-50% of federal budget between 1997-2011
 - And accounts for >70% of merchandise exports (40% in 1997)
- Non-oil fiscal deficit >10% of GDP since 2009
 - Oil price for balanced budget = \$120 & ↑
- Composition of exports has narrowed since 1990s
- Russia now far less diversified than in Soviet epoch

Natural resource weights

- Higher energy prices but \uparrow constant prices

Structure of exports in real terms



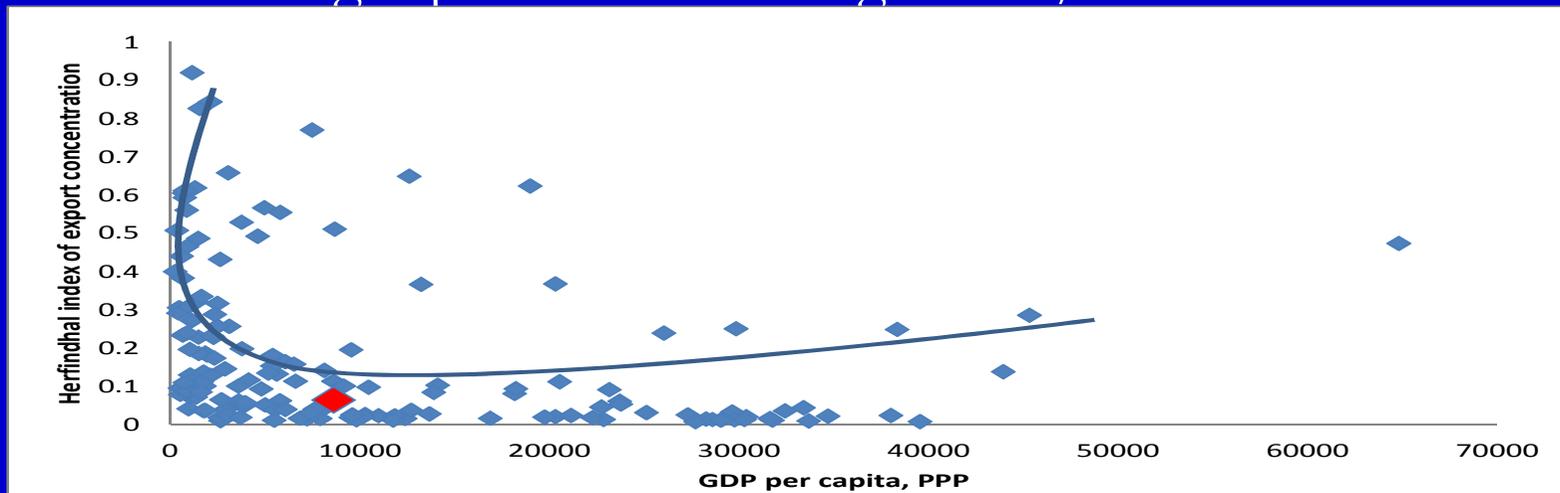
Sources: Rosstat and authors' calculations. In 2007 constant prices.

Why diversify?

1. Limiting natural resource price risk/volatility
2. Restricting rent-seeking & associated political economy risks / pathology
3. Raising intensity of job creation
4. ↑complexity of exportables & associated skills
5. Cross-country experience - more diversified economies perform better over time

Specialisation

- Poor and rich ($> \$20Kpc$) economies tend to specialise
- Countries in the middle (e.g., Russia) tend to be more diversified
 - Note: part of Russian policy mix has also been to encourage specialisation in high tech / innovative sectors



Source: Feenstra and others (2005), IMF and authors calculations. Based on 2000 data for 156 countries

Framework

3

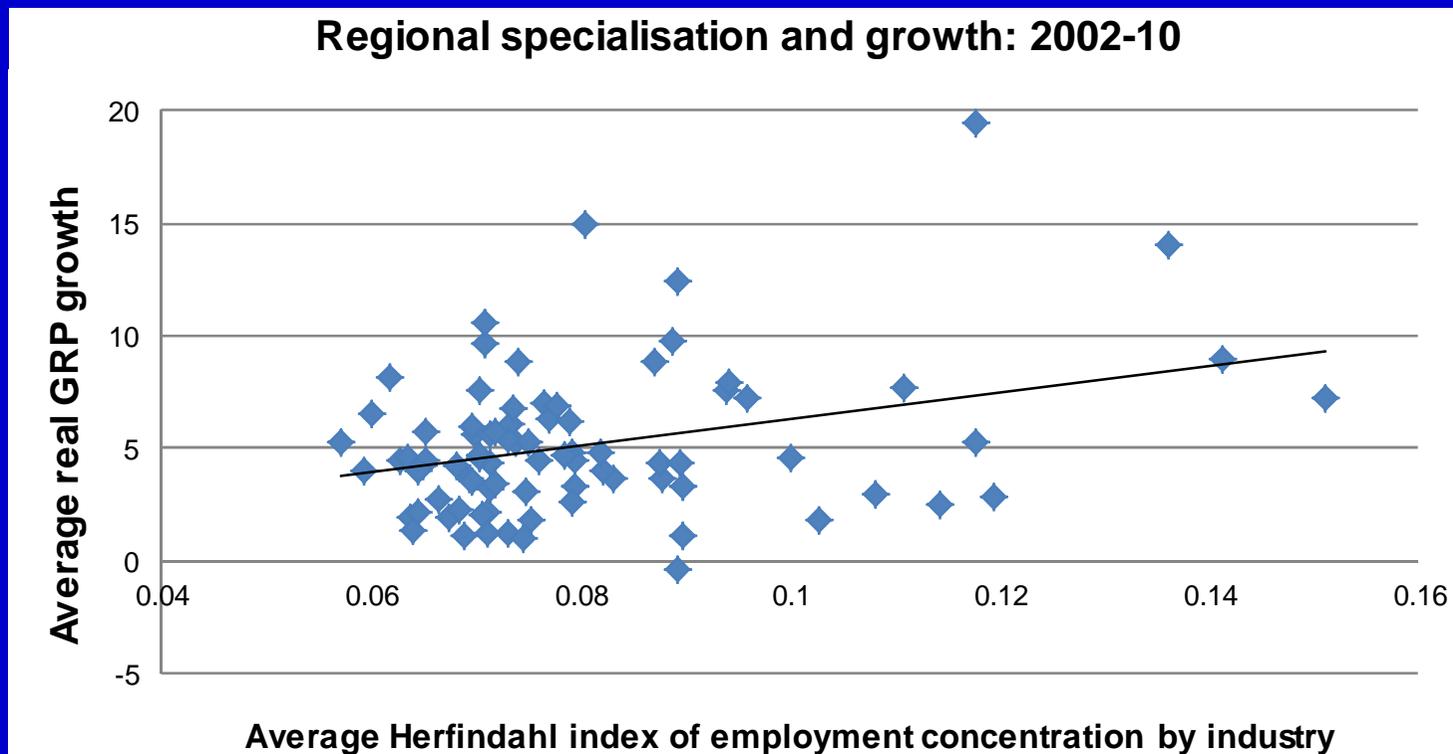
Firm productivity	Structural factors	Technology access
<ul style="list-style-type: none">• <i>Competitive pressure</i>• <i>Entry & Exit</i>• <i>Quality of management</i>• <i>Quality of governance</i>• <i>Access to finance & cost of capital</i>	<ul style="list-style-type: none">• <i>Human capital & education</i>• <i>Migration policy</i>• <i>Physical infrastructure</i>• <i>Clusters – SEZs</i>• <i>Technology Parks</i>• <i>R&D spending and tax incentives</i>• <i>Venture finance</i>	<ul style="list-style-type: none">• <i>FDI attraction – tax regime</i>• <i>Market access & location</i>• <i>Legal protection – patents and IPRP</i>• <i>Licensing speed</i>• <i>Links between science & business</i>

Impediments to diversification business environment

- Bad business environment that is not improving – even acknowledged by Putin!
- Firm surveys indicate that main perceived constraints are:
 - Corruption
 - Power supply
 - Access to land
 - Availability of skills
- But large differences in BE across regions
 - e.g., Kaluga vs Primorski Krai

Diversification with regional specialisation

- Regional specialisation changed little between 2002-10 - more specialised regions grew faster
- In principle, economy can diversify as regions specialise but new region capabilities needed



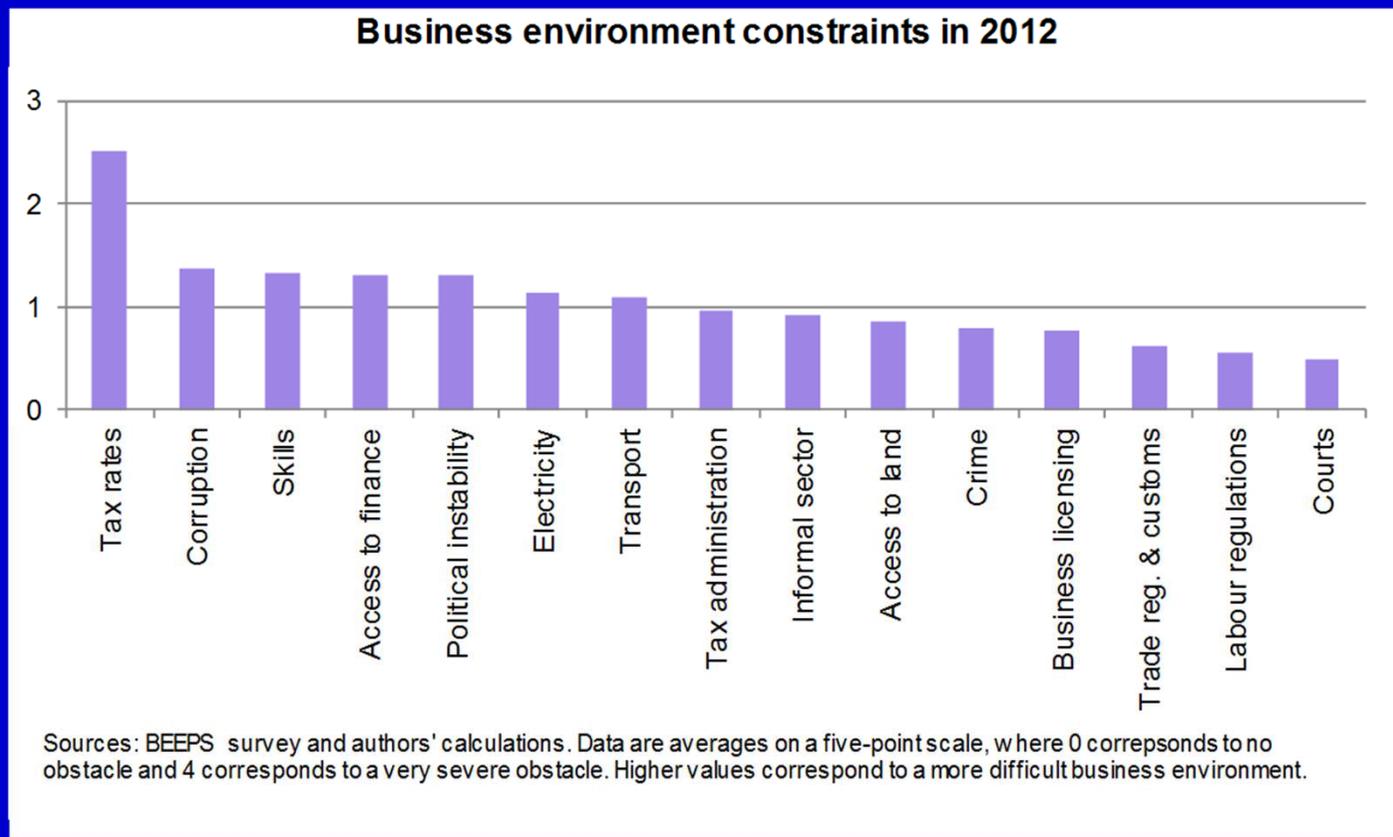
Sources: Rosstat and authors' calculations.

Impediments to diversification: entry/exit & competition

- Economy still dominated by large firms - SMES only at 50% EU level
 - SMEs account for c30% turnover; 25% employment & 10% investment
- Few firms export (3% versus 15%+ in France)
 - Need to streamline procedures for tax refunds; better incentives for exporters (e.g., tax benefits); reform of customs to reduce delays and graft
- Low entry and exit rates & limited evidence of entry in higher value added activity
- Competition also attenuated
- Competition Law & Authority exist – but enforcement weak

Reported constraints to business: regional evidence

- New data show some improvement since 2009 but only to mid-2000s level
- Tax rates, inadequate workforce skills and corruption most significant obstacles - but large variation by region



Business environment

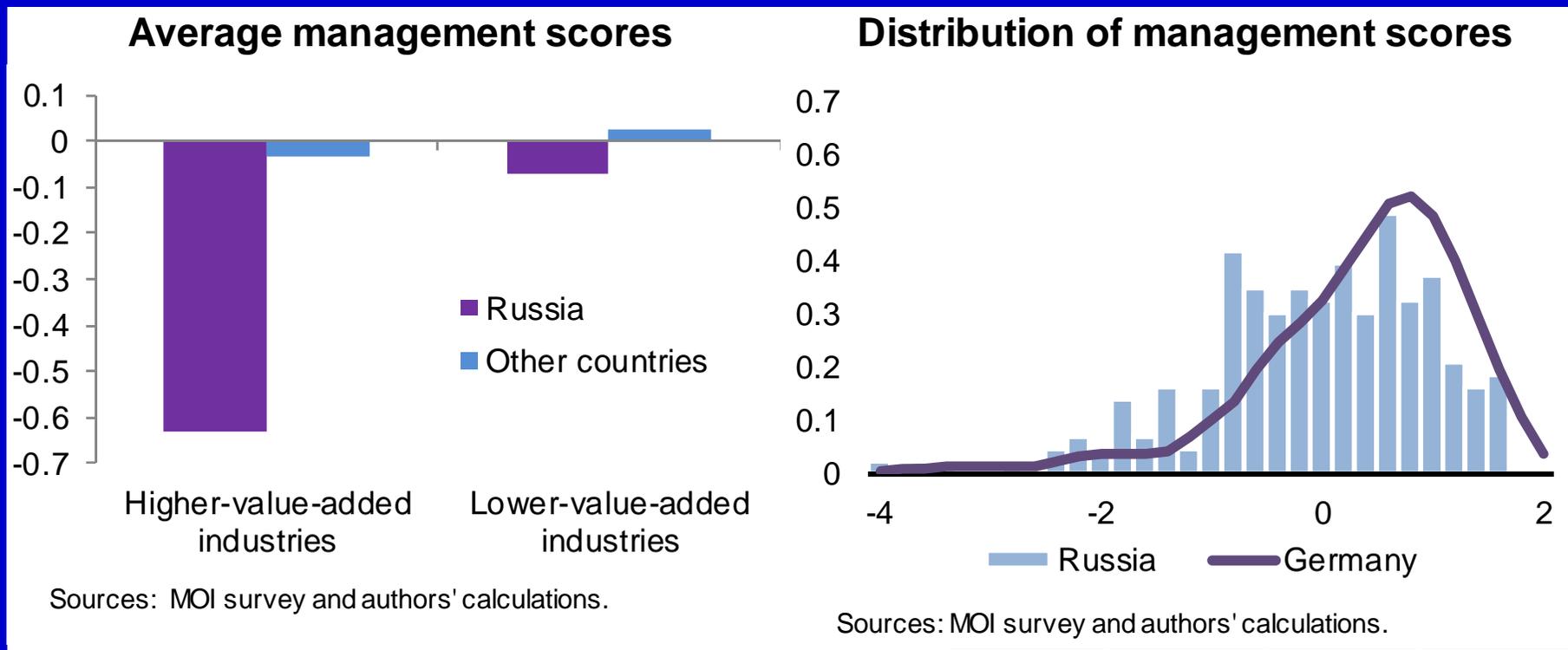
- Some liberalisation in 2000s re; licensing, firm registration, inspections regimes
- But generally weak enforcement
- Regional enforcement and agendas vary significantly
 - Kaluga versus Primorsky Krai!
- Despite recognition of BE as problem – no strong evidence of willingness to act: why?

Skills limit diversification

- Diversification held back by existing skill sets
- Requires development of new skills including management
- Low management quality holds down productivity
 - Weak presence of MNEs
 - Low participation in export markets also limits better management

Management scores

- Russian management skills scores are poor & worse on average in higher-value-added industries
- Some well-managed companies – but also a large tail of poorly managed companies



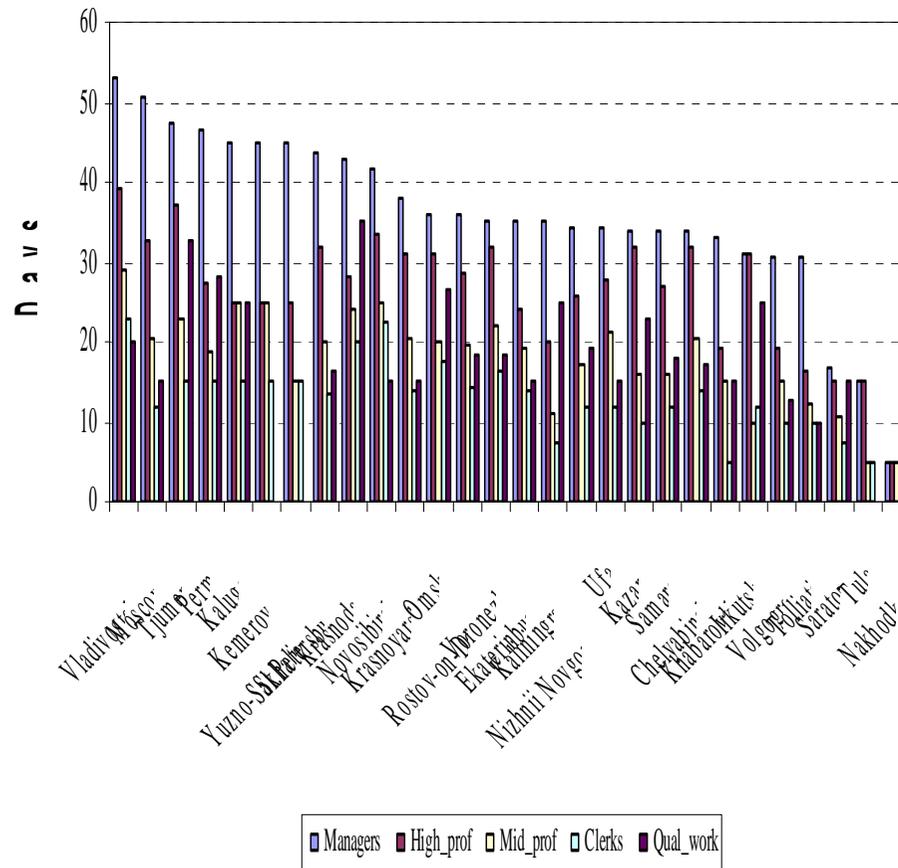
Education & skills

- Companies complain of skill shortages
- Survey of recruitment firms (n=270) throughout Russia
 - Search time significant; increasing in skills & large wage premia
- Firms find it particularly difficult to fill jobs in ‘innovative’ sectors
 - Recruiting managers or high level professionals takes 3-4 times longer
- Consequences include limits on investment & modernisation of plant
- Migration regime is still quite closed / restrictive
 - Formal migration channel in 2010 =1.2 m
 - Most (>80%) requests for unskilled/semi-skilled workers
 - Wage distribution indicates some top talent picking – but not much!
 - Conversely – evidence of continuing brain drain from Russia
- Educational attainments/scores stagnating/declining (PISA and TIMSS)

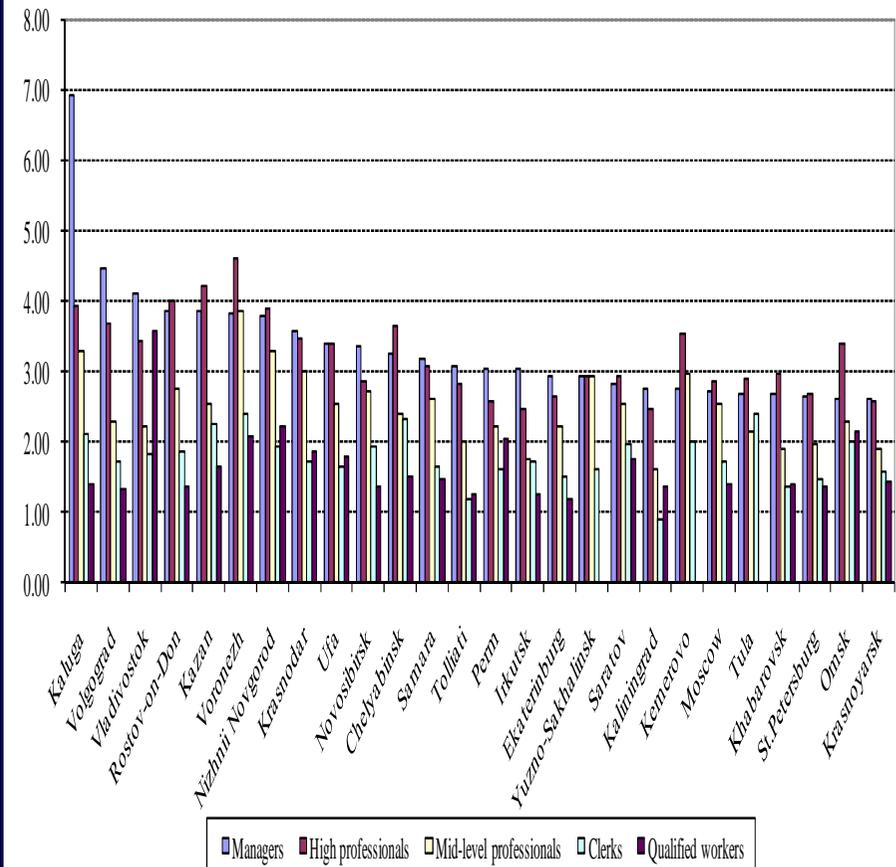
Recruiter survey

Vacancies: search & wage

Search time

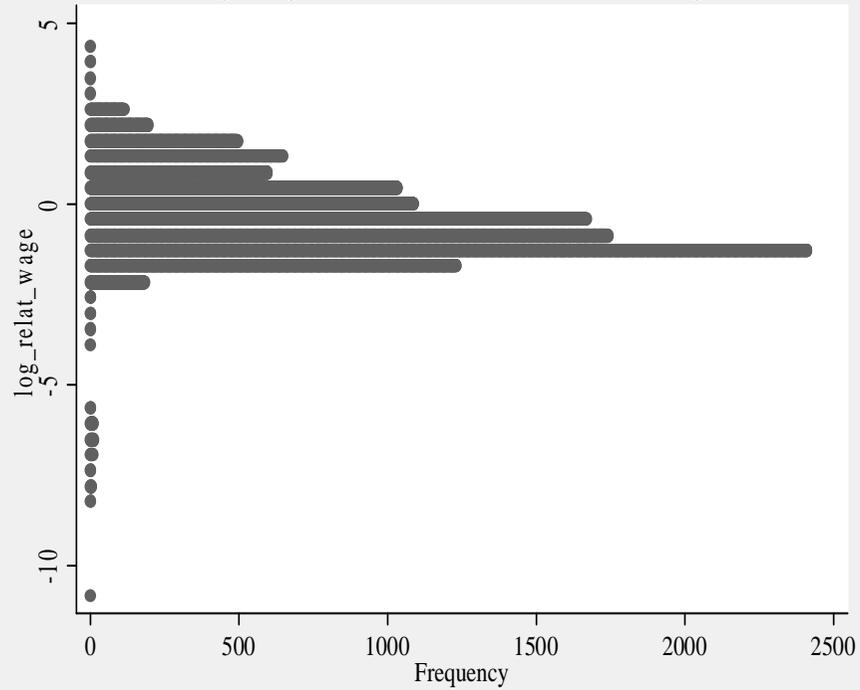


Relative wage to fill a vacancy

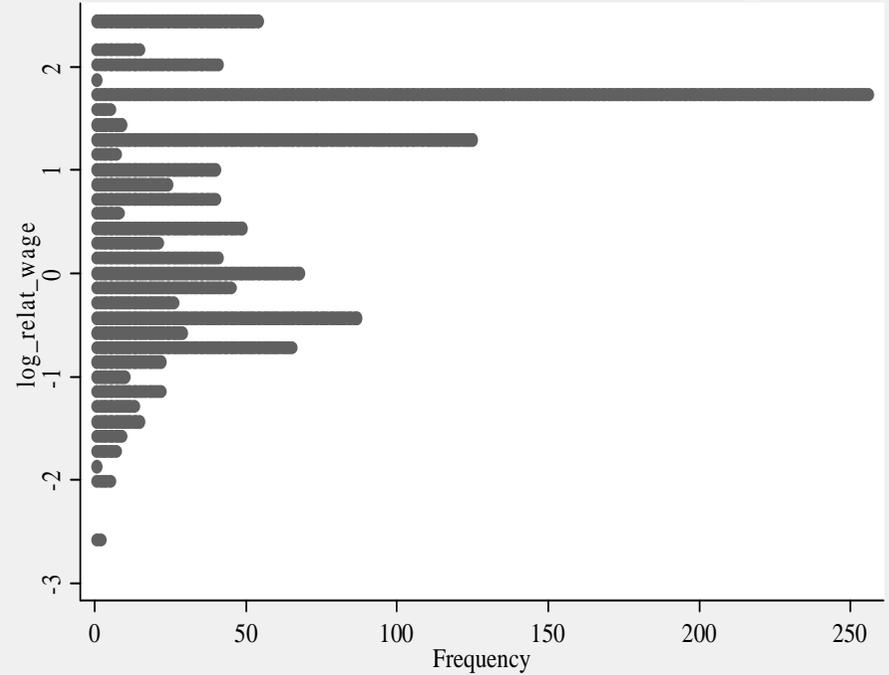


Migrant relative wages

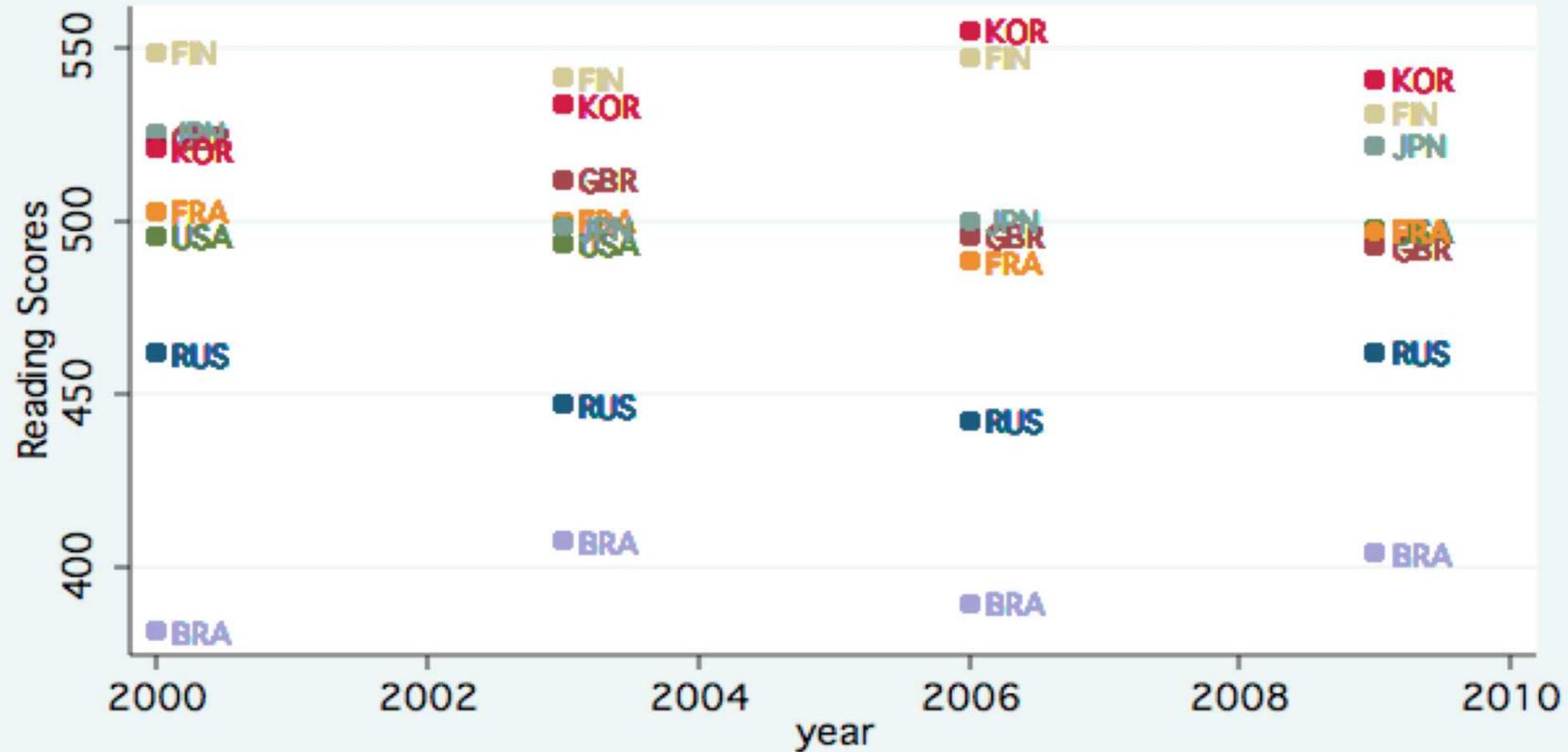
Log Wage distribution Production Managers



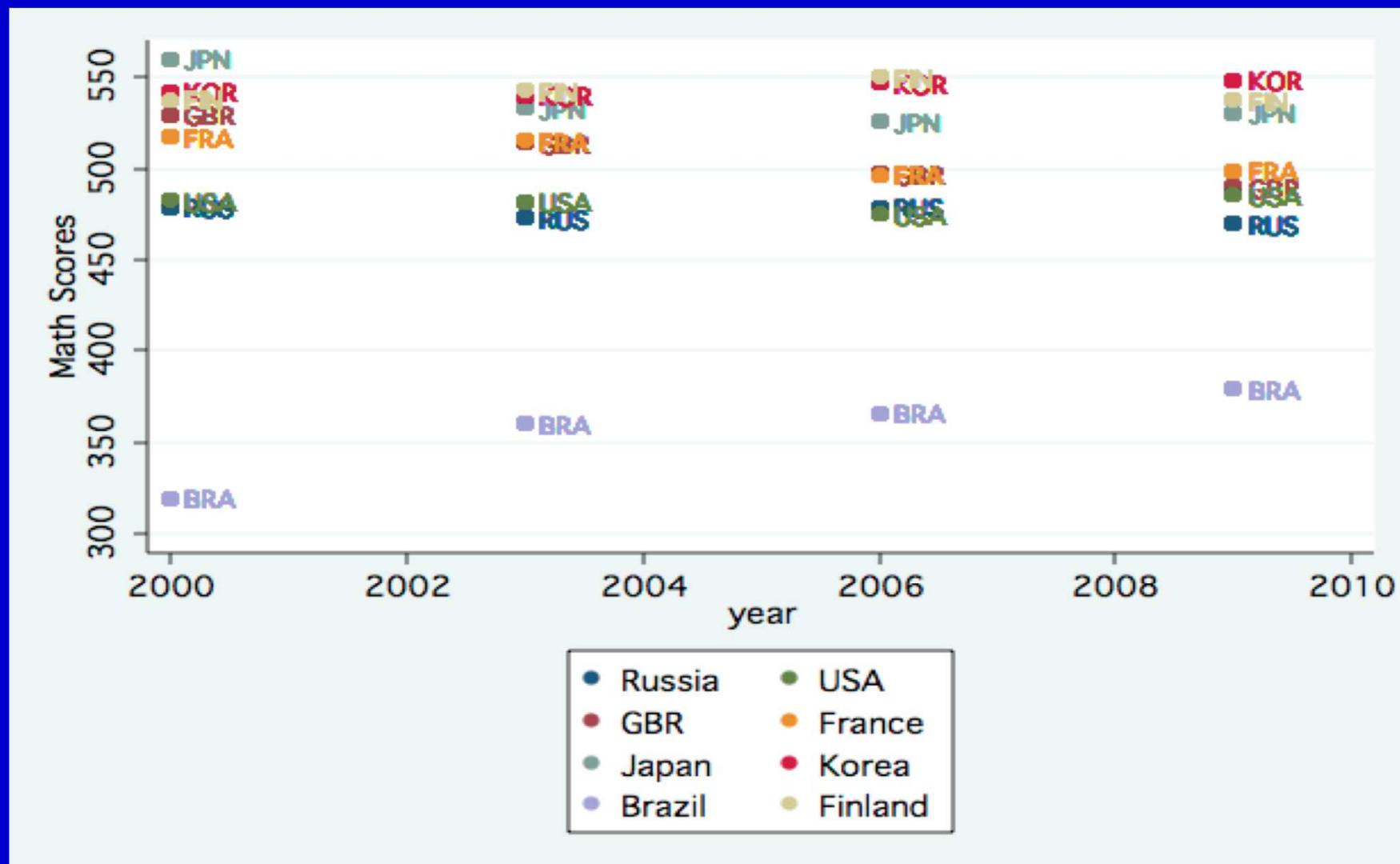
Log Wage distribution Production Managers top 10%



Average Scores- PISA: Reading



Average Scores- PISA: Maths



Policy options for education

- Need for educational reform – less focus on inputs/resources; more on outputs
- More effective decentralisation – current approach is ineffectual
- Enabling framework for greater diversity in supply of education + better regulation
- Scope for experimentation with management, governance and funding of schools
 - Swedish / UK models; Charter Schools in USA

Innovation

- Several possible models:
 - Imitation: scale economies in large firms with access to long run finance, limited competition & entry
 - Invention: higher entry rates, competition and innovation not concentrated in large firms
- Large incumbent model qualified by Soviet past, although favoured by policy - national champions
- Other TEs show that large foreign firms often leading innovation players – but limited presence
- Invention route not present – held back by:
 - weak property rights, absent finance for small companies; weak complementary investment; human capital etc.,

R&D

Locus & Incentives

- Most R&D done by public institutions (75%) with a poor track record
 - Tied to established institutions, cost-based & linked to employment
→ inefficiencies
- Largely absent link of R&D to market
- Company-led innovation remains very limited
- Some positive changes in royalty rules & incentives but IPR still very weakly enforced
- Tax regime only recently used – limited to so-called advanced technologies & problems in design

Infrastructure for innovation

- Policy has explicitly aimed at clustering
- Comparative experience – needs good institutional/regulatory environment + incentives for companies
 - Skolkovo is most high profile (\$3bn 2010-2014)
 - 64 technology parks over 35 regions
 - SEZs also set up but high tech ones have struggled: dispute legislation keeps away FDI
- Industrial policy also used – 35% public funding share to priority areas (nano-; IT, medical, space and nuclear, energy efficiency)

Financing Innovation

- Innovation needs finance at all stages of cycle
 - External funding for R&D always problematic
- Some increase in bank financing for incumbents
- But financing through the chain not available
 - e.g., early stage funding absent
- Small grants to researchers should be complemented by grants to entrepreneurs
- Implement through an independent agency with private participation (funding / governance)

Financing innovation

- Main thrust of policy – large public VC /PE operations, notably *Rosnano*
- Assumption: market failure + coordination
- Hard to evaluate interventions systematically given timing & data
- Seems that private VC /PE crowded-out
- State-led model of financing introduces own distortions & does not address fundamental impediments

Conclusions

- The big policy objectives are still right: Russia needs to diversify & modernise!
- But state-led model has yielded limited results
- Major impediments remain:
 - Business climate is bad (although regional variation) & a clear lack of political commitment to fix
 - Major barriers to exporters persist
 - Educational outcomes stagnating or deteriorating
 - Chronic skills shortages
 - Innovation held back by poor incentives / framework
 - Funding model may not be appropriate & lacks adequate transparency