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Bridging the gap in competitiveness of Russian companies with intangible bricks

This study comprises research findings from the project 15-18-20039 supported by the Russian Science Foundation

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21.04.2016



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Motivation

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 - obsolete technologies,
 - depreciated assets,
 - insufficient level of investment in human resources and marketing
- Russian economy falls behind in productivity and intensifies low value-added production (McCarthy et al., 2014)

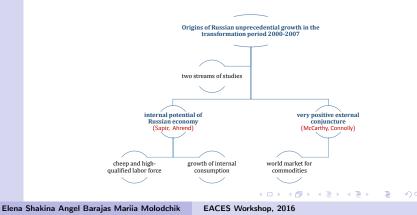
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Research question

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• whether a gap in the most important intangible resources of Russian companies with respect to their European rivals cause a dearth of competitiveness

Elena Shakina Angel Barajas Mariia Molodchik Low competitiveness of Russian companies: the academic discussion



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 - competitive advantages in resource-based and energy-intensive sectors

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- weak institutions (were not rebuilt in post-soviet period),
- dearth of global competitiveness of Russian product,
- unbalanced development of sectors
 - competitive advantages in resource-based and energy-intensive sectors
 - disadvantages in machinery, consumer durables, medicinal and pharmaceutical goods

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- Long-term orientation of companies (Beck et al., 2007, Kuznetsov et al., 2011).
- Development of human capital (Fan et al., 1999; Rose, 2000; Clark, 2003).
- Governmental support of innovative activities (Krammer, 2009; Savitskaya & Torkkeli, 2011)

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• Regional trade infrastructure (Sapir, 2001).

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• EVA - measure of competitiveness

- $EVA_{gap} = (EVA_R \overline{EVA_{EU}})|_{ind year} > 0$ then Russian companies outperform their European rivals
- $EVA_{gap} = (EVA_R \overline{EVA_{EU}})|_{ind year} < 0$ then Russian companies underperform their European rivals

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Elena Shakina Angel Barajas Mariia Molodchik Research Design and Methodology:

gaps in intangible endowment Gaps in intangible endowment (GIE) is specified as follows

$$\textit{GIE} = \left\{ egin{array}{ll} \textit{if} \ \textit{x}_{ij} - \textit{continues}, (\textit{x}_{ij} - \overline{\textit{x}_{EU}})|_{\textit{ind} \ \textit{year}} \ \textit{if} \ \textit{y}_{ij} - \textit{dummy}, \textit{y}_{ij}^{\textit{R}} \end{array}
ight.$$

Core econometric specification:

$$\textit{EVA}_{gap} = f((x_{ij} - \overline{x_{EU}}), y_{ij}^{R}, \textit{CV})$$

• The following determinants are examined:

- Productivity
- Strategic long-term orientation of companies
- Quality of human capital
- Innovative behavior of companies
- Foreign investments
- Corporate networks

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Descriptive analysis and T-test for EVA

Group	Number of	Mean	Std. Err.	Std.
	observations			Dev.
Russian companies	8072	-0.062	0.0038	0.349
European companies	14441	-0.029	0.0007	0.089
Combined	22513	-0.041	0.0015	0.221
Difference		-0.033	0.0031	
	diff = mean(RC) -			
	mean(EC)	t	-10.7667	
	Ho: diff $= 0$	degrees of freedom	22511	
	Ha: diff < 0	Ha: diff = 0	Ha: diff > 0	
	Pr(T < t) = 0.0000	Pr(T > t) = 0.0000	Pr(T > t) = 1.0000	

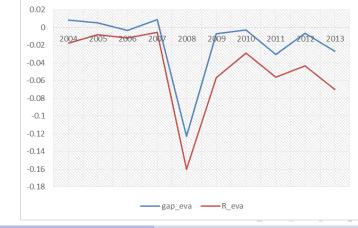
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Source: self-elaboration

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Gap in competitiveness of Russian companies in dynamics



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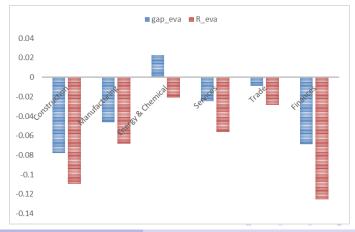
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Gap in competitiveness of Russian companies by industries



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Gap in intangible endowment of Russian companies in dynamics

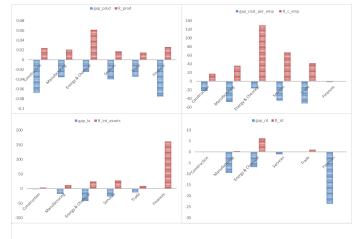


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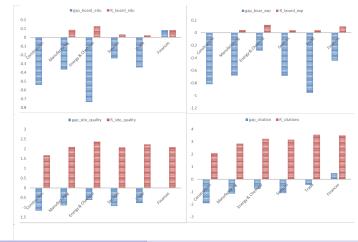


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Determinants of the gap in EVA

Gaps in intangible endowment	(1)
Productivity by output	0.170***
	(0.0214)
Cost of employees	0.000853
	(0.000528)
ERP implementation	-0.0142**
	(0.00582)
Strategy implementation	0.0117***
	(0.00451)
Qualification of board of directors	0.0400***
	(0.0137)
Intangible assets	-0.000787***
	(0.000175)
R&D investments	-0.000399
	(0.000533)
Foreign capital	0.000976
	(0.00978)
Participation in professional associations	0.0185
	(0.0242)
Corporate site quality	-0.00341
	(0.00380)
Site citations on the Internet	-0.00495
	(0.00396)
Company location	0.0217**
	(0.0106)
Number of subsidiaries	-0.000226
	(0.000232)

Number of observations 5,654 $R^2 = 26\%$ $\langle \Box \rangle$ $\langle \Box \rangle$

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Conclusions

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 - insufficient qualification of top management
 - short-term strategic orientation