

MNEs and a cluster: a 'chicken or egg' discussion

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Russian Cluster Observatory



A cluster-specific research and consulting center, established at HSE **ISSEK** in 2012

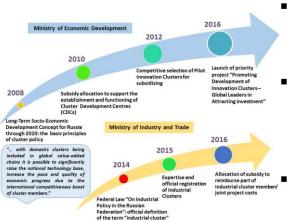
Expertise in cluster excellence, regional studies, innovation and industryrelated policies design

Services from legal acts drafting to cluster management training, and from policy makers consulting to cluster evaluation

Access point to data on clusters and cluster organisations throughout Russia



Cluster policy milestones



Cluster policy contribution

- Drafting legal framework, regulating the launch and activity arrangements of innovative and industrial clusters
- Expertise of cluster applications for public funding provided by the Ministry of Economic Development (2012-2015) and the Ministry of Industry and Trade (since 2016)
- Performance evaluation of clusters, engineering centers and technological platforms
- Running the project office to foster horizontal cooperation among innovative clusters
- Publishing cluster relevant guidelines and analytics

Cluster policy outcomes



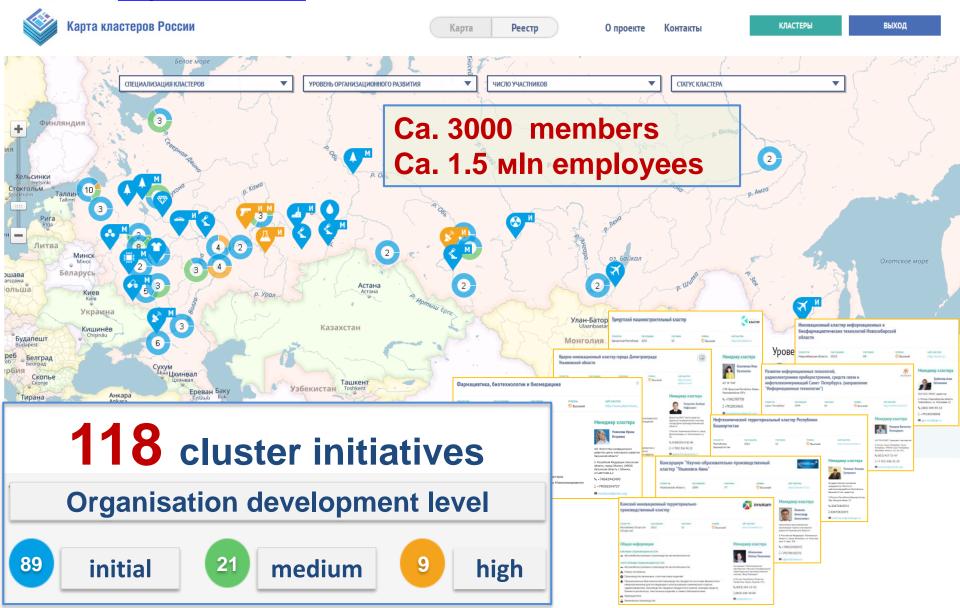
- 34 Cluster **Development Centers** 33 regions
 - ~ €20 m 2010-2016
- Clusters
 - 12 Leading 12 regions 2016-2020

- 27 Pilot Innovative Clusters
- 28 regions
- ~ €100 m 2013-2015
- 43 Industrial Clusters 27 regions
 - 8 joint projects ~ €56 m
 - 2016-2017



Cluster Map of Russia: online, free and user-friendly platform with relevant data on clusters countrywide

map.cluster.hse.ru





International activities of leading Russian clusters



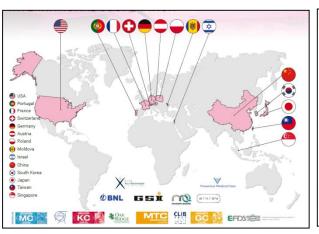
PLASTICS *Assocomoplast VDA



Valley of Machine-Building **Lipetsk Cluster**

INNOKAM Cluster of Tatarstan

Bashkortostan Petrochemical Cluster







Moscow Region Consortium of Innovation BRIGHT CITY Cluster of Mordovia Clusters

Ulyanovsk Aerospace & Nuclear Cluster



- 1. Research background and design
- 2. MNEs in Russian clusters: a snapshot
- The interplay of MNEs and clusters: preliminary research outcomes
- 4. Future research challenges



1. Research background and design



Research background: glocalization

Balanced approach to regional development:

- Embeddedness and regional context are important success factors (Ghemawat, 2007). <u>BUT</u> excessive focus on the properties of the territory, informal interactions can lead to the trap of the closure (Asheim, Isaksen, 2002) => **sticky VS ubiquitous knowledge**
- Regional development largely depends on external interactions, access to global channels for the reproduction of advanced achievements (Bathelt, Malmberg, Maskell, 2004) => **local buzz + global pipelines**

Regional assets and MNEs: strategic coupling

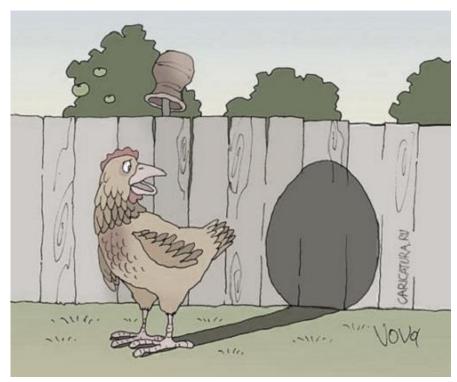
- The more unique and demanded by the global players are the resources of the region, the stronger and longer their connection ("cohesion") with this territory
- These local advantages the "assets" of the region can be of interest and value to large corporations that are integrated into global industrial networks. (Coe et al, 2004)

MNEs in a regional context, and the role of / impact on clusters

- MNEs combine global reach and advantages of drawing upon regionally available competences (Bartlett & Ghoshal, 1989)
- Institutional and project-based levels of MNEs connections to regions: differ by intensity of bonds and are not always consequential => search for effective means to involve MNCs in regional clusters (Mattes, 2013)
- The resilience of clusters builds on integrative effects from their network through external actors and knowledge interactions (Martin and Sunley 2011; Simmie and Martin 2010)



- Are these cluster / regional conditions that attract MNEs, or
- MNEs that open regional branches, then foster the emergence of a cluster in its area of specialization?



Source: https://caricatura.ru/top/best/url/parad/vova/15037/&gfc=4914018



Data and methodology

Step 1. Express analysis of 'MNEs in clusters' landscape



Method: desk research



Sample: 118 cluster initiatives registered on Cluster Map of Russia



Criteria:

- Relation to cluster: member / partner
- MNE: industry; headquarters
- Host cluster: industrial / innovative/ supported by CDC / none; new / old
- Host region: investment / innovative ranks

Step 2. Deeper analysis of selected cases



Method: semi-structured interview



Sample: 4 managers of leading CMOs



Questions:







- Role of clusters in attracting MNEs, and their integration into the local economy
- Forms of MNEs' participation in cluster governance
- Joint cluster projects involving MNEs
- Impact of MNE's quitting the region on a cluster
- Interaction model of SEZ, which concentrate most MNEs in Russia, and clusters



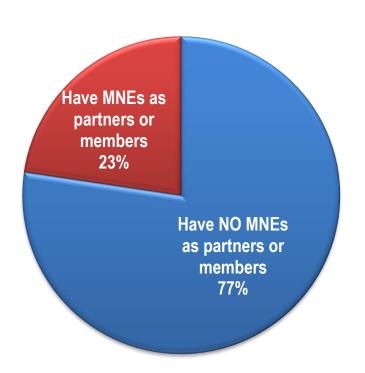
2. MNEs in Russian clusters: a snapshot

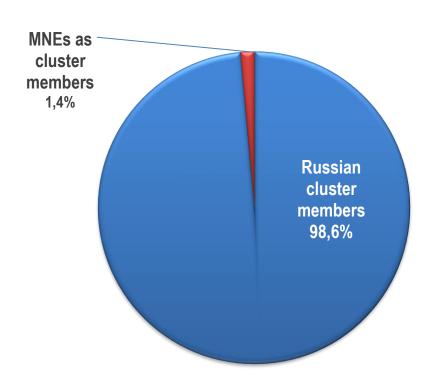


Domestic companies and MNEs in Russian clusters

Share of clusters with MNEs as partners or members





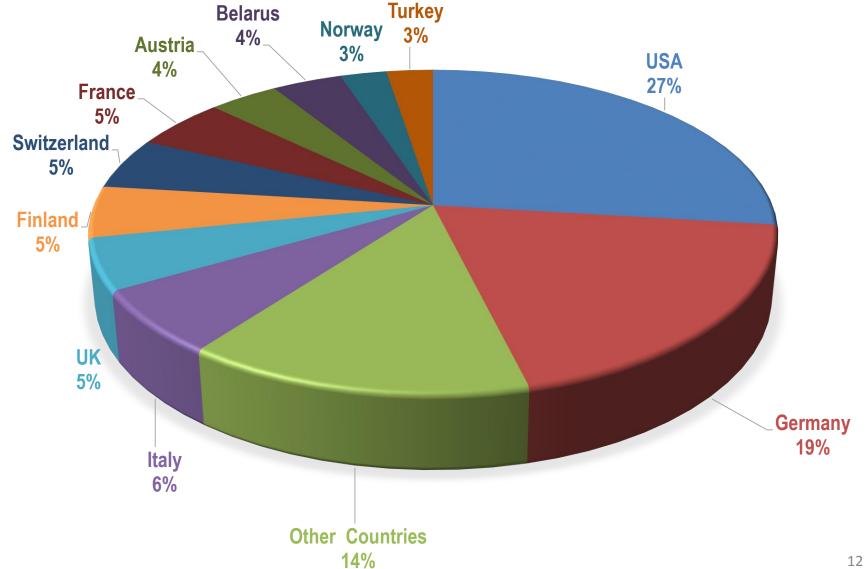


More efforts are needed to increase global visibility of Russian clusters:

- Workshop on cluster collaboration opportunities in APEC: Moscow, November 2019
- TCI Global Conference: Kazan, October 2020



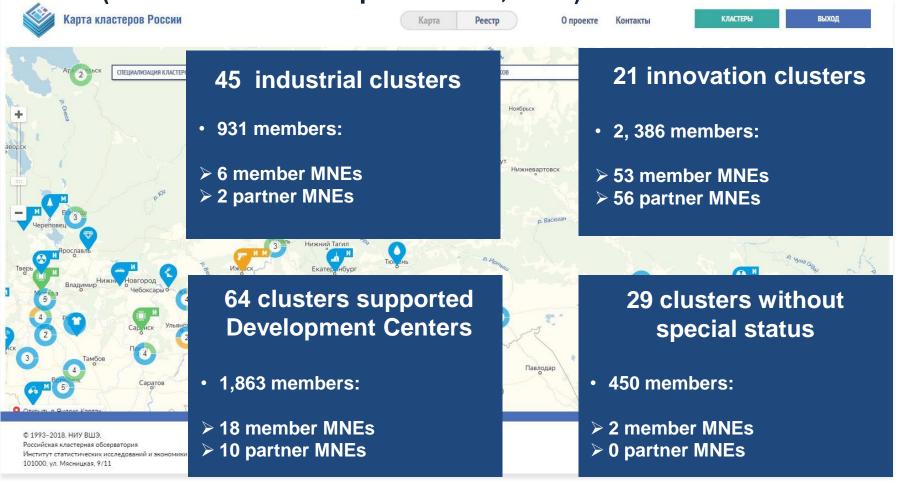
Home Countries of Headquarters of MNEs' – the members of Russian Clusters





Distribution of MNEs among clusters

(source – Cluster Map of Russia, 2019)



- 1. Most MNEs are located in innovation clusters (15 out of 25 have MNEs as partners or members)
- 2. Least MNEs are located in clusters without any status (2 out of 29 have MNEs as partners or members)

The MNEs are embedded in clusters, which have relevant KPIs induced by public programs - ?



Internationalization as a focus of innovation cluster support programs

Pilot innovation clusters (2013-2015)

Leading innovation clusters (2016-2020)

Beneficiaries: 25 clusters from 28 regions

Total funds: €100 m

Funded activities:

- Developing innovation and educational, engineering and social infrastructure
- Strengthening cooperation, promoting cluster member products in external markets
- Staff training

KPI achieved by 2015:

 Pilot innovation clusters' export revenues are 20% higher than regional average Beneficiaries: 12 clusters from 12 regions

Support: consulting, training, priority access to available support initiatives, road mapping

Supported activities:

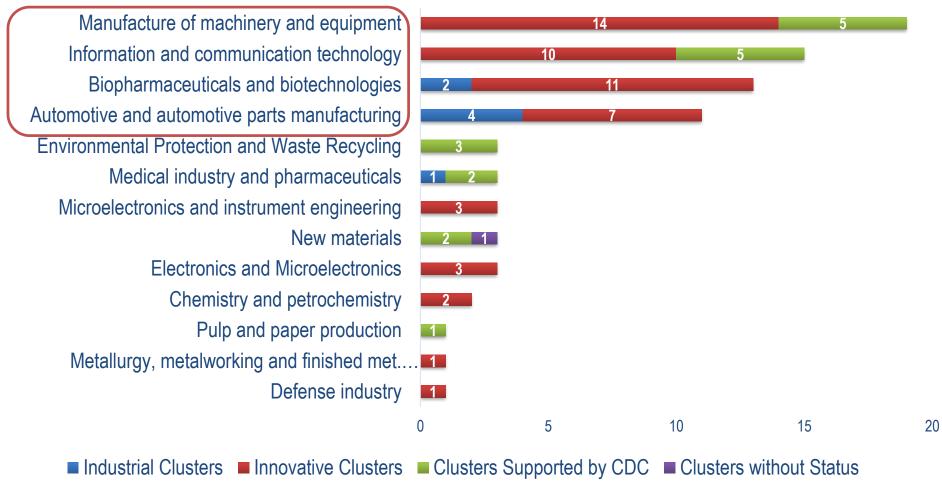
- Innovation infrastructure building
- Promoting export of high-tech products
- Attracting FDI
- Technology commercialisation
- Cluster management excellence (ESCA)
- Modernization of core companies

KPI to be achieved by 2020:

 50% increase (from US\$ 5.6 bln) of exports, excluding raw materials



MNEs in Russian clusters by industry



Most MNEs are located in innovation clusters, with the focus on machinery & equipment manufacturing, biopharma, ICT and automotive

MNEs are mostly attracted to embed in regions with clusters operating in new industries / technological domains -? => an implication for policymakers...

15



Key MNEs represented in Russian Clusters

Pharmaceuticals and Biotechnology



Manufacture of machinery and equipment



Information and communication technology



Automotive industry









Return

Intelligence











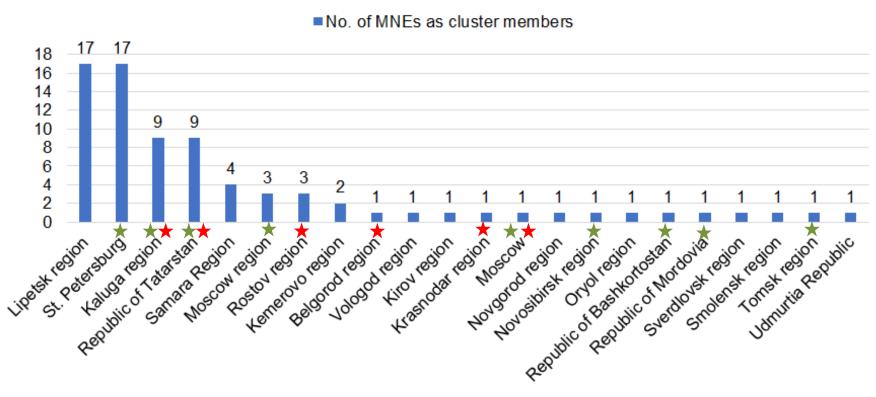








The number of MNEs in Russian clusters by regions and their innovation and investment attractiveness ranks



Top 15 innovative regions according to HSE Russian Regional Innovation Development Ranking (2015 data)

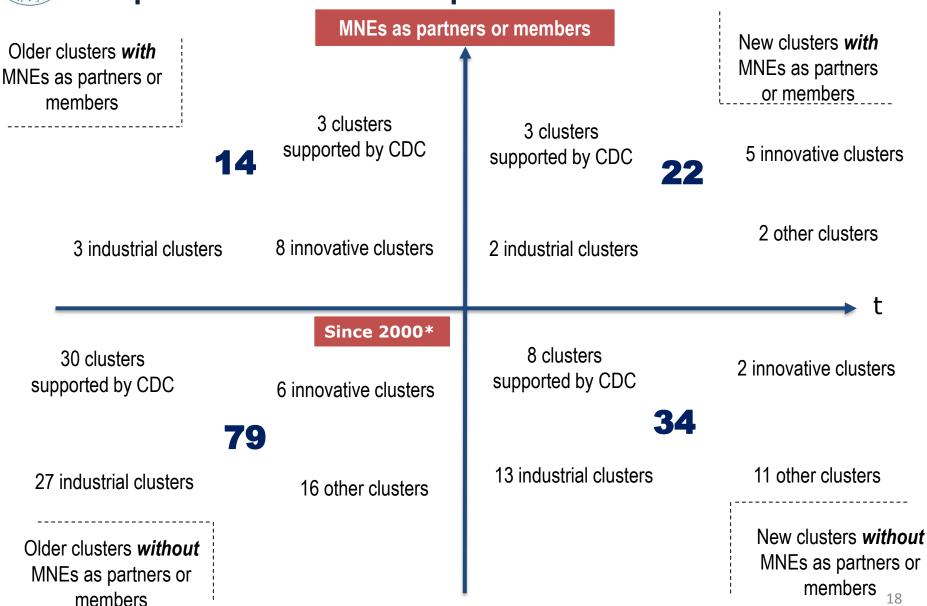
Top 15 regions according to the National Rating of the Investment Climate (2015 data)

Most MNEs are in clusters located in regions with high innovation or/and investment attractiveness ranks

What are the features of regional policy that help attract MNEs?



Types of clusters according to the time of emergence and the presence of MNEs as partners or members



^{*} We assume that since this period (after the default of 1998 and the beginning of the growth of the Russian economy), foreign companies have received more incentives to transfer production to Russia



3. The interplay of MNEs and clusters: preliminary research outcomes



MNEs as a cluster's founding fathers



PHARMACEUTICAL CLUSTER of KALUGA:

- · Bio- and radiopharmaceuticals
- Nuclear medicine

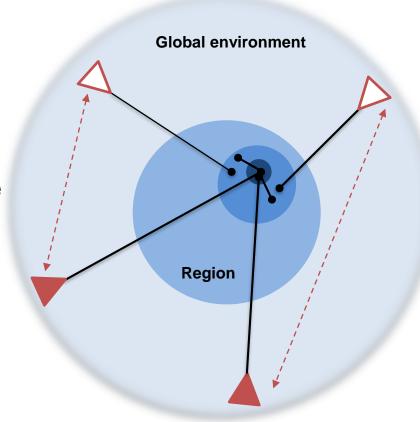








- MNEs are co-founders and anchor members of the cluster initiative
- MNEs were localized in the region in industrial parks due to active investment policy
- Top managers of MNEs are in turns Chairmen of the Cluster Board
- Joint cluster projects with MNEs:
 - Kagocel® production: Stada + Niarmedic => co-opetition effect
- Impact of MNE's quitting the region on a cluster:
 opposite the cluster cannot embrace all new MNEs
- Key values of embeddedness:
 - to MNEs: access to services of CMO (incl. GR, HR, networks) and regional government (SPIC)
 - to cluster / region: new MNEs, new business culture, joint projects, value chain











Entering region / cluster

◆--→ Sharing experience of regional embeddedness



MNE as one of the cluster anchor members



INNOKAM CLUSTER OF TATARSTAN:

- Automotive components manufacturing
- Downstream chemical products



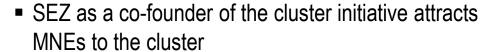




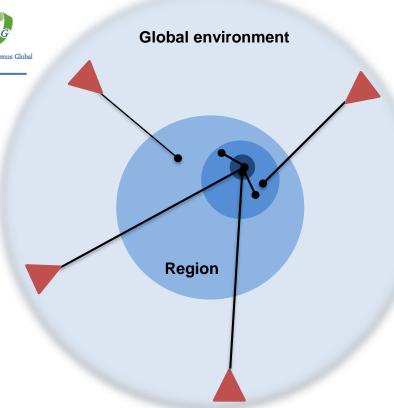








- MNEs are cluster members OR strategic partners of cluster anchor members
- MNEs are part of General Assembly of cluster management organization (CMO) and are involved in cluster governance
- Joint cluster projects with MNEs:
 - Olefin complex EP-1200 construction: Linde AG + Nizhnekamskneftekhim PJSC
- Impact of MNE's quitting the region on a cluster: Ford
- Key values of embeddedness:
 - o to MNEs: access to services of CMO (incl. GR, HR, networks) and regional government
 - to cluster / region: infrastructural projects (e.g. construction of an industrial park)



Cluster

SEZ - special economic zone

MNE

Entering region / cluster



Cluster as an MNE per se



MOSCOW INTERNATIONAL MEDICAL CLUSTER:

- Healthcare services (diagnostics, treatment, rehabilitation)
- Medical education and R&D



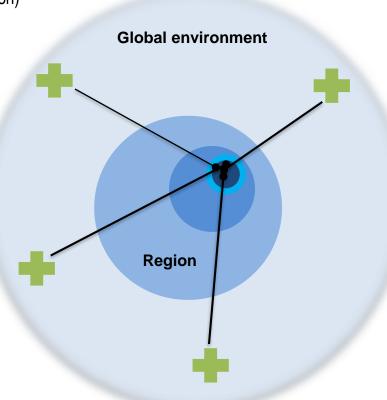








- The cluster initiative was launched for MNEs
- MNEs are localized in the region under special legal regime
 like in their home (OECD) countries, national regulations do not apply
- No participation in cluster governance; instead bringing new treatment and medical education culture
- Joint cluster projects with MNEs:
 - each MNE is a project per se: operator + investor
- Impact of MNE's quitting the region on a cluster: NO
- Key values of embeddedness:
 - to MNEs: special legal regime, services of CMO, infrastructure, ↓ land rental rates, public co-investment
 - to cluster / region: unique career and educational opportunities for Russian doctors and biomedical researchers, and access to world-class healthcare to patients in their own country



Cluster



Special legal regime



SKOLKOVO spatially-isolated complex



Global clinics => MNEs



Entering cluster



Findings and New questions

- MNEs are attracted by regional policy measures, with clusters operating in new industries / technological domains.
- Cluster management role is to provide added value to MNEs and keep them within.
- MNEs attraction to clusters is out of scope of national cluster policy.

What are the features of regions / clusters / national policy that attract MNEs and keep them in local environment? What are the effects of MNEs on regions / clusters? What policy interventions are most effective to attract MNEs?