

MPRA

Munich Personal RePEc Archive

Financing cluster initiatives

Skokan, Karel

VSB-Technical University of Ostrava, The Faculty of
Economics

2005

Online at <http://mpra.ub.uni-muenchen.de/12373/>

MPRA Paper No. 12373, posted 26. December 2008 / 15:26

FINANCING CLUSTER INITIATIVES

**Karel Skokan, Department of European Integration
Faculty of Economics, VSB-Technical University of Ostrava, Czech Republic**

Abstract

In the last two decades hundreds of cluster initiatives have been launched involving virtually all regions of the world and their number is growing. Cluster initiatives are viewed as conscious actions taken by various actors to create or strengthen clusters. There are multiple relevant actors, and they may relate to each other in different ways. Governments and other public authorities are known to be responsible for most cluster initiatives, although there is a marked geographical variation. At the end of the 1990s, industrial and regional policy increasingly concentrated on stimulating clusters and clustering processes in many EU member states using different forms of support. The paper describes the rationale for regional cluster initiatives in general and presents different approaches of countries to the financing the specific programmes for cluster development. Although public funds should not be viewed as systematic aid and should comply with the State aid regulations, experts recognise that they are often needed to support start-up projects, networking, information, research, education, and specialised infrastructure. At the end of paper the Czech way to financing cluster initiatives is presented based on government programme with the financial contribution of EU Structural Funds.

Key words: competitiveness, region, cluster, cluster initiative, cluster policy, financing development programme.

JEL Classification: O38, R11, R58

1. Clusters and cluster initiatives in EU development policies

The Lisbon process of the EU has placed competitiveness firmly at the centre of political attention. In 2005 different new basic strategic documents were adopted by the European Commission for the implementation of the drafted goals focused to cohesion policy and innovation and competitiveness.

In Community Strategic Guidelines 2007-2013 for Cohesion Policy in Support of Growth and Jobs, the emphasis is given i.a. to establishing poles of excellence, bringing together high technology SMEs around research and technological institutions, or by developing and creating regional *clusters* around large companies or to the existence of *clusters* of innovative businesses [2].

Competitiveness and Innovation Framework Programme (2007-2013) will bring together into a common framework specific Community support programmes and relevant parts of other Community programmes in fields critical to boosting European productivity, innovation capacity and sustainable growth [6]. This will include fostering sector-specific innovation, *clusters*, public-private innovation partnerships, and the application of innovation management. The focus on innovation, *clusters* and networks is visible in different actions and measures everywhere in the official documents and policies.

Industry or regional clusters are today recognised as an important instrument for promoting industrial development, innovation, competitiveness and growth. Although primarily driven by the efforts made by private companies and individuals, clusters are influenced by various actors, including governments and other public institutions at national and regional levels. That cluster concept covers a variety of different business structures, national-regional-cross-border clusters, clusters of competence, industrial or production systems and innovation systems and is used for different purposes to increase the competitiveness of SMEs, support collective research, rationalize a whole industry, implement environment management system. This is why there are so many different definitions, but almost all of them share the idea of proximity, networking and specialisation. The most widely used definition is Porter's [1].

“Clusters are geographically close groups of interconnected companies and associated institutions in a particular field, linked by common technologies and skills. They normally exist within a geographic area where ease of communication, logistics and personal interaction is possible. Clusters are normally concentrated in regions and sometimes in a single town”.

Clusters develop over time; they are not a phenomenon that just appears or disappears overnight. For many clusters, the roots of their development go back many years. Natural factors like resources or the location at a major trading route or river can have effects on the presence of specific clusters that are felt many years after they have lost their direct influence. Another root for cluster development can be the existence of initial institutions, such as companies or universities, which over time act as an anchor for the cluster spinning-off new businesses and attracting the investment from companies outside the region. In order to focus the debates on innovation and competitiveness which clusters are expected to initiate and increase, the following definition is proposed by Nauwelaers [4].

“The cluster is a mode of organization of the productive system, characterized by a geographical concentration of a critical mass of economic actors and other organizations, specialized in a common field of activity, developing inter-relations of a market and non-market nature, and contributing to innovation and competitiveness of its members and the territory.”

Nowadays national and regional authorities often actively tend to develop clusters. Many countries have now moved beyond an initial analytic phase reviewing their clusters and their historical development, to seeking engagement in upgrading or creating clusters launching coordinated cluster activities in the form of cluster initiatives.

It is important to distinguish between clusters - groups of companies in a geographical region or industrial sector, sharing resources and experience for mutual benefit - and cluster initiatives (CIs) - efforts organised by government or enterprise to increase the growth and competitiveness of clusters within a region. Cluster initiatives typically include three strands: cluster companies, government, and the research community. While clusters are a long-standing phenomenon, many of the most successful in recent years have been linked with concerted initiatives. CIs are now appearing in less-developed regions of advanced economies, as well as in developing economies.

“Cluster initiatives” are viewed as conscious actions taken by various actors to create or strengthen clusters. There are multiple relevant actors, and they may relate to each other in

different ways. Governments and other public authorities are known to be responsible for most cluster initiatives, although there is a marked geographical variation. Government, or a publicly-funded economic development agency, usually acts as the initial sponsor of cluster initiatives, with the private sector then quickly taking up leadership. CIs are organised efforts to increase growth and competitiveness of clusters within the region, involving cluster firms, government, and/or the research and academic community. They can be developed at different levels, however most are at a local/regional level, not national. The cluster development process balances analysis and action, seeking to deliver some early benefits to cluster participants.

The first cluster initiatives were launched in the 1970s and 1980s in Italy, and have become renowned in the industrial district literature. Denmark was among the pacesetters in developing cluster policies. Its Industrial Network Co-operation Programme fostered clusters between companies – it was launched in 1989 and terminated in 1992. In that period it provided financial support to over 300 inter-firm networks. This programme has subsequently been ‘copied’ in countries such as Australia and the USA. Since then on many cluster initiatives developed in different parts of the world in developed or developing economies as it can be seen on Figure 1.

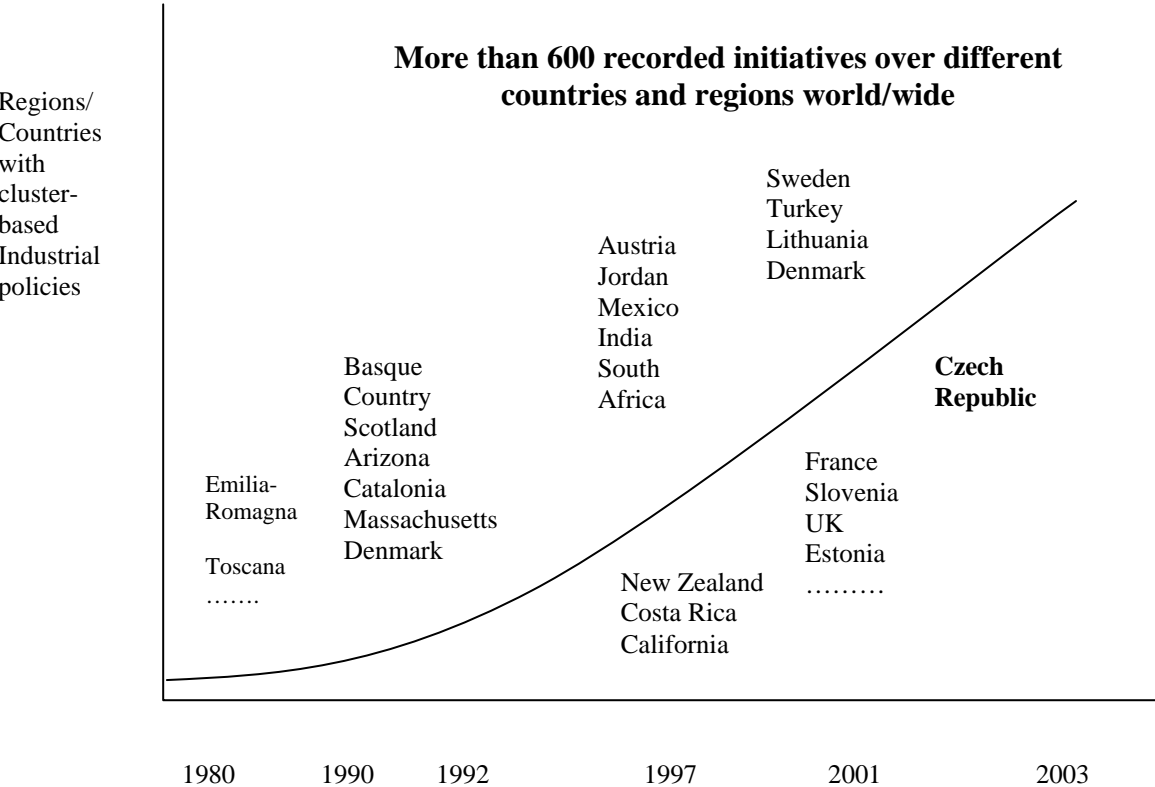


Figure 1: Cluster Initiatives Development in the World

Cluster initiatives have made key contributions in three clear areas. They stimulate weak regions and declining industrial sectors. They attract investment into clusters and networks, rather than individual firms. Thirdly, most CIs (throughout the world) are supporting research-intensive clusters.

At the end of the 1990s, industrial and regional policy increasingly concentrated on stimulating clusters and clustering processes [6]. Recent initiatives of cluster mapping and

policy formulation have been launched in countries like Denmark (the re-start), Portugal and the United Kingdom, but also in new EU countries like Slovenia, Latvia and Czech Republic.

Cluster initiatives have become a central feature in improving growth and competitiveness. The Green book on cluster initiatives [9] identified more than 500 cluster initiatives around the world, primarily in Europe, North America, New Zealand and Australia. The main outcomes of the cluster initiatives research are as follows:

- Every CI is unique. The settings varies from developed to transition and developing countries, from prosperous to weak regions and from strong to weak clusters.
- CIs are more frequent in developed economies and in transition economies. CIs tend to focus on technology intensive areas. Most CIs are found in IT, medical device, production technology, communication equipment, biopharmaceuticals and automotive and the majority were initiated after 1995.
- CIs are initiated by government (32%), by industry (27%) or equally by both (35%), however companies are most influential parties of governance in CIs.
- Financing comes primarily from government (54%), from industry (18%) or equally from both (26%).
- Almost all CIs (89%) have a dedicated facilitator and many (68%) have some sort of office.

Practically all initiatives declared improved cluster competitiveness.

2. Cluster policies

Cluster initiatives have developed as a new policy agenda, most often as an outgrowth from traditional policy areas such as regional policy, innovation policy and industrial policy. CIs are emerging within three distinct policy fields: (1) regional industry and SMEs policies, (2) FDI attraction policy, (3) science, research and innovation policies, which are often being summarised under the concept of cluster policies [8].

The definition of “cluster policies” is not homogeneous and varies in a number of ways.

- They bear the mark of different policy areas: industrial policy, regional development policy, innovation policy or technology policy.
- Their target differ: from mega-clusters to local networks, with a growing attention to knowledge-based agglomerations.
- They can deal with national, regional or local (municipal) clusters.
- They address cluster creation or later stages of their life.
- They act on the clusters environment or more directly on the dynamics of the cluster itself.
- They can be characterised by a more “top down” or “bottom up” character.
- Finally, they are developed at various levels: local, regional or national, international, sometimes in combination.

In cluster policies there is the large variety in approaches. Some countries - Denmark, France, the Netherlands, Portugal and the United Kingdom (Scotland) - have a more or less distinct national cluster policy that aims to support national and regional clusters in different ways. A national cluster programme has also been launched very recently in Sweden.

In Belgium and Spain the cluster policy is regionally defined. Examples of a distinct cluster policy can be seen in the Flanders, and in the Basque region, although there are examples also

in other regions in the two countries. Generally, in the federal states cluster policy is developed and implemented at the regional level, and therefore objectives, goals and instruments are often very different from one region to the other. This may also be the case in countries with newly created decentralised regional development institutions (such as the United Kingdom).

Table 1: Examples of initiatives supporting cluster development in some EU countries

Country	Responsible authorities	Cluster policies or initiatives	Financial support	Results & examples of clusters
Austria	Federal Government	Federal programmes k plus and k ind/k net programme	Public subsidy 72 mil € for competence centres	48 Clusters in Austria
	Implementation: Provincial Governments	Strategic Programme Upper Austria 2000+	Regional funds	8 clusters in Clusterland
France	National Government (DATAR) Implementation: Regional Governments	SPL Policy (1997-2000)	Public subsidy (budget: € 3,6 million) Selection process of the projects: call for tender	100 cluster projects
Germany	Federal Government Ministries for education and for economics	InnoRegio - Innovative Networks in East Germany	Public subsidy 250 mil. € between 23 regions up until 2006	500 cluster projects
		BioRegio	25 mil € per region	Bioregion Munchen
United Kingdom	National Government Implementation: RDAs in England Scottish Enterprise Welsh assembly	Cluster development & Innovation policies (2000) DTI's Cluster Mapping project (2001)	Innovative Clusters Fund - 22 mil. € Regional innovation fund - 55 mil. €	Over 150 potential regional clusters
Slovenia	Ministry of Economy	Cluster Programme under the Industrial Policy	Public subsidy 2003-2000: 5,9 mil €	29 projects supported
Czech Republic	National Government (CzechInvest)	Programme Clusters	EU Structural Funds within Operational Programme Industry	26 applications for cluster project support in 2005

Source: Adapted by TrendChart of innovation [4]

In other countries one can find specific regional cluster instruments, but not a fully developed cluster policy. Then, the cluster approach does not pervade enterprise or regional policy, but some specific measures that aim to support some regional clusters exist. In these cases the promotion of clustering is used as an element of, in particular, innovation and technology policy and regional policy. Austria, Finland, Germany, Italy and Norway are seen to have interesting cluster instruments. In the federal states of Austria and Germany the selected

policy instruments are designed and implemented at the regional level, and not at the national one.

An interesting factor in CIs development is financing that changes greatly with the age of cluster and the time the CI started. According to Cluster initiatives survey in Green Book [9] the involvement of government and industries in financing is as follows:

Table 2: Financing cluster initiatives

Initiation year	1996 -	1999-1997	2000-2001	2002-2003
Industry financing	32	23	13	12
Joint financing	32	30	25	17
Government fin.	36	47	62	71

Source: Adapted by Green Book [9]

Any cluster initiative involves two types of funding: the cost of facilitation namely in initiative phases, and the cost of implementing practical activities. Government plays an important role in providing seed financing. For new CIs and for newly started CIs government financing dominates completely. Over time, membership fees and other sources of support from industry increase in importance, reducing the reliance on government backing.

3. Financing cluster initiatives in Czech Republic

In the Czech Republic the national cluster policy dominates the cluster development and official government approach to cluster policy was developed only in the last few years. It started with Pilot study on Clusters in North Moravia Silesia (Ostrava, 2002) and was followed by launching the Cluster programme 2004-2006 financing by EU Structural funds. The National cluster strategy was adopted by the Czech government in July 2005 and National cluster study (Cluster mapping project) was prepared in the end of 2005. Based upon the outcomes of the programme and studies new cluster policy is being prepared for the period 2007-2013 generously supported by Structural funds.

The support of Cluster programme 2004-2006 is involved in Operational Programme Industry and Enterprise within the Measure: Development of Information and Consulting Services. The Objective of the programme is to increase economic growth and economic competitiveness through development of industry associations – clusters. Clusters can be created at regional, national and cross-border levels [7].

The objective of the programme shall be attained through the necessary support to groups of companies and associated institutions in these two types of projects:

- Search for companies suitable for association in clusters, assessment of viability and benefits of clusters (Phase I).
- Establishment and development of clusters and fulfilment of their mission (Phase II).

The total subsidy for three year period 2004-2006 amounts 9 mil. € of which 6,75 mil. € will come from European Regional Development Fund and the rest from state budget. The main parameters for project subsidies are given in table 3.

The support to search for suitable companies for cluster will be provided in the course of 8 months after the registration of the application for subsidy. Support to the establishment and subsequently the development of a cluster will be provided in the course of three years after the registration of the application for support in order to achieve its independent and sustainable development in the period. The support is provided in the form of a subsidy for eligible cost not exceeding 75% of total eligible cost of the project. Granting of support is conditioned by participation of at least 60% of cluster members from small- and medium-sized enterprises sector and tertiary education institutions and research institutions with their seat in the Czech Republic.

Table 3: Programme CLUSTERS characteristics

Type of support	Phase I Search for companies suitable for clusters	Phase II Establishment and development of clusters
Amount	max. 75 % of eligible cost and 6 – 33 thousand €	max. 75 % (1st year), 50 % (2nd year), 25 % (3rd year) of eligible cost , total max. 50 % of eligible cost , 0,1- 1,5 mil. €
Final recipients	regional authorities, their organizations, universities, research institutes or CzechInvest	legal entities pursuant to special law existing or established for the purpose of cluster operation and supporting the innovation and competitiveness of group of companies in industry
Project eligibility criteria	at least ten companies, university and regional authority for the study preparation focused to innovation and export promotion	at least 15 independent organizations and institutions of tertiary education or research institutes, majority of cluster member (min. 60%) shall be SMEs, sustainability of cluster focused to innovation and exports

Source: CzechInvest [3]

4. Conclusions

Cluster development is quite generally accepted as an important mechanism to improve competitiveness. Cluster initiatives are mostly launched in the context of regional development policies, where they are often a means to an end rather than policy goals in themselves. The type and contents of cluster policies varies considerably from country to country, including initiatives where cluster policy is about strengthening the ‘triple helix’ relationships, i.e. between government, industry and academia, type of cluster policy which focuses more narrowly on R&D cooperation between companies and between companies and research organisations and cluster initiatives which focus on encouraging co-operation between companies, regardless whether this is about R&D, and either horizontally and/or vertically, thus strengthening the value chain in existing clusters.

The implementation of cluster policy is done at national, regional and local level making the use of different cluster initiatives, which are mostly financed from public funds. And this is also the case of the Czech Republic with the access to EU structural funds.

References:

1. Anderson, T. et al. The Cluster Policies Whitebook. Malmö. IKED, 2004. ISBN 91-85281-03-4.
2. Cohesion Policy in Support of Growth and Jobs: Community Strategic Guidelines, 2007-2013. Communication from the Commission. Brussels, 05.07.2005 COM(2005) 0299.
3. Development programme CLUSTERS at CzechInvest web site <http://www.klastr.cz>.
4. European Trend Chart on Innovation. Thematic Report Cluster Policies. Brussels: EC, Enterprise DG, 2003.
5. Final Report of the Experts Group on Enterprise Clusters and Network. Brussels: Enterprise DG, 2003.
URL:< http://europa.eu.int/comm/enterprise/entrepreneurship/support_measures>.
6. Integrated Guidelines for Growth and Jobs (2005 – 2008). Brussels, 12.4.2005 COM(2005) 141 final.
7. Programme Complement of the Operational Program Industry and Enterprises. Prague: MIT, 2004.
8. Regional clusters in Europe. Observatory of European SMES, 2002, No. 3. ISBN 92-894-3560-7.
9. Sölvell, Ö., Ketels, C. and Lindqvist, G. The Cluster Initiative Greenbook, Stockholm: Ivory Tower, 2003. ISBN 91-974783-1-8.

Published in:

SKOKAN, K. Financing Cluster Initiatives. *Econ '05 (Selected Research Papers)*, Technical University of Ostrava, Faculty of Economics, 2005, Vol. 12, pp. 317-324. ISSN 0862-7908.