

Clusters and Financial Resources Management in the Context of the EU Strategy for the Danube Region

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Abstract: Defined by "the co-location of producers, services providers, educational and research institutions, financial institutions and other private and government institutions related through linkages of different types", clusters can be "engines" of global economic development. Beyond the competitive advantages, clusters promote regional specialization in their field of activity, the regions thus becoming different, but interconnected. In the context of intent cluster-ization at European level and at the European Parliament's call for the "re-industrialization of Europe", the paper examines the critical role of clusters in the context of the EU Strategy for the Danube Region (SUERD) from the financial resources management perspective and it concludes the macro-region of 14 Danube riparian countries, attracting European funds, able to bring prosperity and growth passing through the Danubian innovative clusters. The analysis uses the most recent official data, official documents published by the European Commission and other institutions in the field.

Keywords: cluster policy; financial instruments; EUSDR

1. Introduction

The EU Strategy for the Danube Region (EUSDR), Project / Community instrument of macro-regional cooperation, promoted at EU level by Romania and Austria aims at strengthening the region's integration into the EU and ensuring a sustainable framework for strategic integration and coherent development of the Danube region, able to transform into a "region that truly belongs to the 21st century, secure and confident in their own forces and one of the most attractive in Europe." (COM (2010) 715/4).

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In terms of geographic aspects, the strategy includes, primarily, but not exclusively: Germany (Baden-Württemberg and Bavaria), Austria, Slovakia, the Czech Republic, Hungary, Slovenia, Romania and Bulgaria within the EU, and Croatia, Serbia, Bosnia and Herzegovina, Montenegro, Moldova and Ukraine (regions located along the Danube) outside the Union.

The Macro-regional approach of the EU Strategy for the Danube Region (EUSDR) focuses on better policy coordination and the implementation of development programs in the regions and EU Member States or non-EU members, where the river crosses, by respecting the principle of the 3 NO's:

- No new institutions;
- NOT changing the EU law;
- NO new funding.

Adopted by the European Council in June 2011, based on these principles, the EU Strategy for the Danube Region, seeks essentially:

- to ensure and sustain the economic, social and cultural development of countries and regions located in the basin of the Danube, in compliance with the environmental protection;
- to reduce the regional disparities poorest and richest, according to EU cohesion policy objectives;
- efficient use of EU funds and attracting new funds for the Danube Region

In particular, the achievement of these objectives was designed by structuring the four pillars of the issue and the establishment of eleven priority areas. (Figure 1).

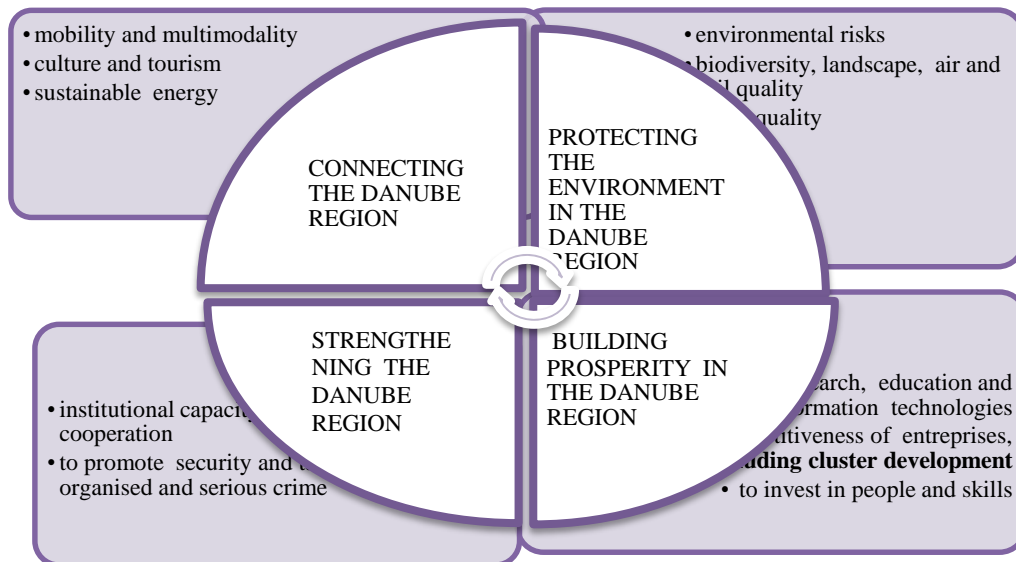


Figure 1. The Pillars and Priority Areas of the EUSDR

As stressed in the Europe 2020 strategy, clusters are an important tool for improving the business environment, and the importance of cluster activities is growing in the Danube Region as more and more countries have adopted active cluster development policies and inter-cluster cooperation has started to move up on the economic agenda at regional level. (ZEW, 2014)

2. Clusters as Powerful Engines of Economic Development and Drivers of Innovation in the EU

In the last decades, clusters - an essential ingredient of economic development - offer a new way to think about economies and economic development and they represents a prominent feature of the global economic landscape.

Defined as “geographical concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, associated institutions (for example universities, standards agencies, and trade associations) in particular fields that compete but also co-operate” (Porter, 1998) or, in more general terms “a group of firms, related economic actors, and institutions that are located near each other and have reached a sufficient scale to develop specialized expertise, services, resources, suppliers and skills”, (SEC(2008)2637) clusters are viewed as instruments to strengthen regional innovation and competitiveness. The success of some world-class clusters - Silicon Valley being the best-known example - is a good practices model, a proof that clusters are among the most relevant microeconomic factors that influence the levels of prosperity of a region. That is

why economic prosperity among the regions of Europe is linked to the degree of cluster strength.

A vast specialized literature - official documents of the European Commission, analyzes and studies prestigious international institutions - structured in the recent years, shows the positive impact of clusters and cluster policy on stimulating innovation, competitiveness and economic growth at local, national, regional and international level. Based on their analysis, The European Cluster Observatory, for example, find that between 30% and 40% of all employment which works in innovative “companies working in a cluster-like environment” are more innovative than non-cluster firms. (Figure 2)

Innovation is higher in clusters than elsewhere (a comparison with IB 2004)

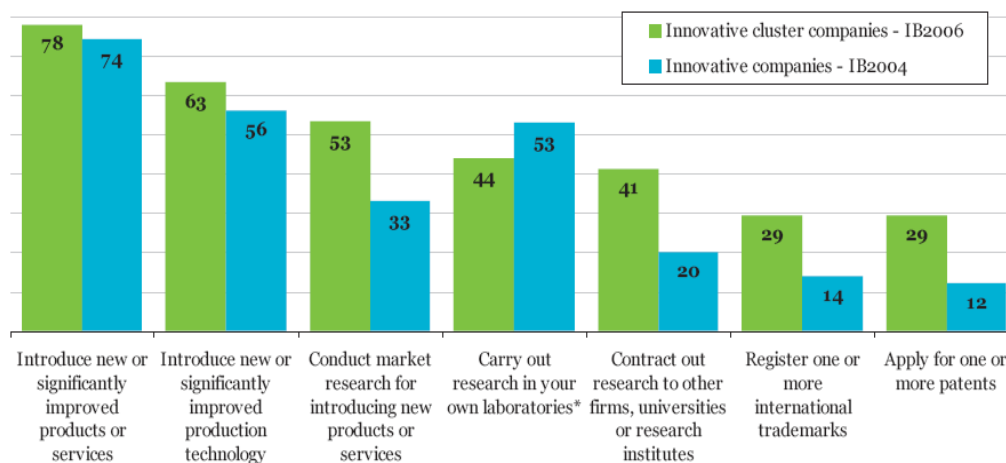


Figure 2.

Source: European Commission (2006d). Innobarometer on cluster's role in facilitating innovation in Europe

In a theoretical perspective, the role of the clusters is synthetic illustrated in a territorial and network approach, from functional, symbolic and normative point of view (Table 1)

Table 1. The role of clusters - a theoretical approach

| | Territorial approach | Network approach |
|---------------------|---|---|
| Functional approach | <p>CLUSTER</p> <ul style="list-style-type: none"> • Diversification and specialisation of activities • Concentration of externalities • Density of proximity contacts • Concentration of tacit knowledge • Reduction of transaction | <p>INTERCONNECTION</p> <ul style="list-style-type: none"> • Cluster as a node in multiple and interacting technological, communication and economic networks • Cluster as interconnection between place and node |

| | costs | |
|--------------------|--|--|
| Symbolic approach | MILIEUX <ul style="list-style-type: none"> • Substrate of collective learning • Uncertainty-reducing operator through: <ul style="list-style-type: none"> - information transcoding - ex-ante co-ordination of private decisions (collective action) | SYMBOL <ul style="list-style-type: none"> • Cluster as a 'landmark' for an innovative region • Cluster as a status symbol for local or regional promotion agencies and politicians • Cluster as a producer for symbols and codes of "change towards a brighter future" and as "change agent" |
| Normative approach | LEARNING REGION <ul style="list-style-type: none"> • Promotion of regional innovation and production systems (RIPS) • Support for higher educational system (HES) to foster human capital • Information and mobilising platform for local and regional actors of small size clusters | INTERNATIONAL COMPETITIVENESS <ul style="list-style-type: none"> • Ranking of international technological Centers of Excellence • Support of incubator centers, start-up or spin-off firms • International promotion platforms of locations and cluster competencies |

Source: (Dümmler, 2002)

In a practical approach, it is important to mention that in the actual global context, in which "our future depends on innovation", the EU has shifted its political focus towards innovation, the knowledge economy and sustainable competitiveness, and the cluster based strategies have become the central place in industry policy, but also in connection with regional and science policy at the EU level. (Ketels, Lindqvist, Solvell, 2012).

In 2006, the European Commission adopted a broad-based innovation strategy and identified strengthening clusters in Europe as one of the nine strategic priorities for successfully promoting innovation. (COM, 2006), it outlined a policy framework for action aiming at raising the level of excellence and openness of clusters.

Through DG Enterprise and Industry (DG ENTR) the European Commission has implemented a set of actions aiming at raising the level of excellence and openness of clusters, including the following tools, instruments and information sources:

- *The European Cluster Excellence Initiative (ECEI)* - launched in 2009, to create more world-class clusters across the EU by strengthening cluster excellence, with the main aim to create a benchmarking methodology for cluster organizations to improve their internal management process and the way they offer services and the

second aim being to develop training materials to help cluster managers improve their own managerial capability;

- *The European Cluster Policy Group (ECPG)*- established in 2008 with a mandate to advise the Commission and Member States on how to better support the development of more world-class clusters in the EU;
- *The European Cluster Observatory (ECO)* - developed in 2006, is a single access point for statistical information, analysis and mapping of clusters and cluster policy in Europe that is foremost aimed at European, national, regional and local policy-makers as well as cluster of managers and representatives of SME intermediaries. It aims at promoting the development of more world-class clusters in Europe, notably with a view to fostering competitiveness and entrepreneurship in emerging industries and facilitating SMEs' access to clusters and internationalization activities through clusters;
- *The European Cluster Collaboration Platform (ECCP)* - launched during the "European Cluster Conference 2010" on September in Brussels in the presence of representatives of the European Commission, cluster managers and cluster experts; at its core, the European Cluster Excellence Initiative provides the access to a European Cluster Collaboration Platform rich in information and services that enables better and more targeted interaction between cluster organizations and their members. The objective is to improve their performance and increase their competitiveness through stimulation of European and international cluster collaboration required;
- *The European Cluster Alliance (ECA)* - (2006) an open platform created under the PRO INNO Europe initiative that brings together over 50 European partners such as ministries, regional authorities and innovation agencies which are responsible for developing and implementing cluster activities in their territories. ECA was founded to act as the main driver for the further preparation of a strategic agenda on clusters and would be open to other cluster initiatives.

The European Cluster Observatory, over the last years, has made an important contribution to a fact-driven policy debate about the role of clusters in the European economy. At the level of the European Commission, it has informed a succession of reports written by high level policy groups as well as Commission communications on clusters and cluster policy:

➤ The European Commission's Communication entitled "*Towards world-class clusters in the EU: Implementing the broad-based innovation strategy*" (2008) outlines a policy framework for action aiming to raise the level of excellence and openness of clusters and mention specific policy steps to do:

- establishing a high-level European Cluster Policy Group to explore;
- ways on how to best assist EU countries in supporting clusters;
- expanding the policy dialogue under the European Cluster Alliance;
- fostering transnational cooperation between cluster organizations;

- promoting excellence of cluster organizations;
- developing the European Cluster Observatory into a full-fledged information;
- service on clusters for enterprises and thereby improving;
- the integration of innovative SMEs into clusters.

➤ The DG Enterprise and Industry Report entitled “*Innovation Clusters in Europe: a statistical analysis and overview of current policy support*” (2008) analyses, on the basis of the best available data, the presence of clusters in Europe and their role as drivers of innovation and economic growth and it describes national and regional approaches in support of clusters. The analysis presented in this document points to a general lack of integration between policy development and execution and it stresses on the lack of guidance on what makes a good strategy, because “good practice” is difficult to apply in an area which is about being different from others. That is why in Europe is need for a common policy framework that brings together the three roads: enabling cluster emergence, supporting cluster initiatives, and connecting clusters through trans-national cluster cooperation and exchange;

➤ In its recommendations the European Cluster Policy Group (2010) stresses that, in order to meet the Europe 2020 strategy, there is a need to consider clusters as a central part of any economic strategy and that the European cluster policies will need to be characterized by a better integration of cluster programmes with the other activities. The ECPG proposes that the next stage of the cluster programmes should be based on the following three principles:

- cluster programmes need to be leveraged with vigorous efforts to strengthen framework conditions
- public support for cluster programmes needs to be based on clusters' ability and willingness to upgrade in the face of global competition
- cluster programmes need to be delivered in an integrated policy framework with clear responsibilities for the Commission and EU Member States.

➤ According to the European Commission Working Document (2010), as it is stressed in the Europe 2020 strategy, clusters are an important component of regional specialization strategies, since they offer to policymakers the opportunity to better streamline different policies towards the objective of stimulating growth through innovation. The document shows that clusters should build on local strengths, helping to create synergies between businesses, universities and research entities and respond to market opportunities.

Part of the Priority Area 8 “Building prosperity in the Danube Region” of the European Strategy for the Danube Region, the cluster development is seen as a key instrument to guide competitiveness and innovation in the Danube Region.

Based on a survey on the cluster landscape in the Danube Region, a Working Group for Cluster of Excellence in PA8 - Competitiveness of Enterprises including Cluster Development (2013) found specific aspects:

- while in the Western part of the Danube Region clusters are driven by innovation, with strong cluster management and clear policy support instruments, in the Western Balkan and Eastern Danube Region a culture for collaboration is missing, especially between SMEs and research;

- clusters are mainly driven by business development and export objectives, even if only few are performing in terms of active cluster management and real cooperation; some countries - Czech Republic, Slovakia, Romania, Bulgaria, Croatia and Serbia developed national cluster associations, represent the interest of clusters and work internally to support their development towards excellence.
- the most clusters from region are specialized in automotive, ICT, wood processing, food and textiles; mechatronics and engineering clusters support advanced manufacturing in countries like Austria, Bulgaria, Czech Republic, Germany, Hungary, Romania, Slovakia;
- the major source of financing for all European Member States in the EUSDR in regard to cluster activities is the European Regional Development Fund, while non-EU member states use the national budgets as main financing source.
- the budgets allocated to cluster differ from country to country: 70% of the Danube Region countries have budget allocations of below 2 million Euros and more than half of them only go up to 0,5 million Euros; Czech Republic, Hungary and Slovenia are the only countries allocating between 20-50 million Euros al national level.

3. Financial Resources Management for EU Strategy for the Danube Region, including Cluster Development

In a globalized world, the resources will flow to more attractive regions, reinforcing the role of clusters and driving towards regional specialization.

Analyzing, in terms of financing, cluster policies and cluster programmes in 31 European countries, the Oxford Research (2008) has identified 69 national cluster programmes from 31 countries, financed from national budgets, European budgets, regional budgets or other sources, the main source of financing being national budgets. (Figure 3)

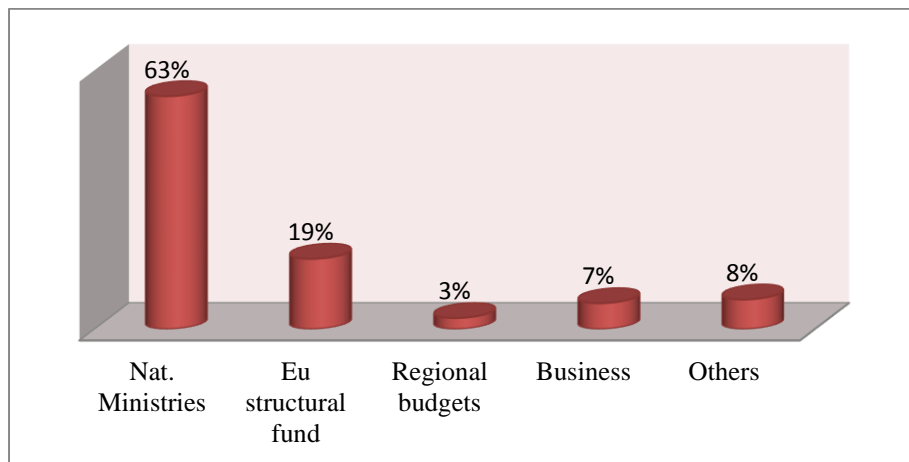


Figure 3. Sources of financing to the European Cluster Programmes

Source: Oxford Research, 2008, "Cluster policy in Europe A brief summary of cluster policies in 31 European countries", Europe Innova Cluster Mapping Project

The comparative analysis between the Multi-annual Financial Framework for the period 2014-2020 and 2007-2014 discloses that the changes which took place appear at the Horizon 2020, FP7, Erasmus for All and LIFE (table 2)

Table 2. The European Financial Frameworks 2014-2020 and 2007-2013

| Programme 2014-2020 | Latest budget 2014-2020 | Comments | Equivalent programme 2007-2013 | Budget |
|---------------------------------------|-------------------------|---|---|---------------------------|
| Horizon 2020 | 70,2 bn eur | Allocation confirmed by European Commission | FP7 and CIP | 50,5 bn euro+ 3,6 bn euro |
| Erasmus for All | 16 bn eur | Allocation confirmed by European Commission | Lifelong Learning Programme and Youth in Action | 7 bn euro +885 m euro |
| Competitiveness and SMEs (COSME) | 2,3 bn uro | | CIP (part) | |
| Connecting Europe | 29,3 bn euro | | TEN-T (transport only) | 8 bn euro |
| LIFE (environment and climate change) | 3,45 bn euro | European Commission/s own estimate | LIFE+ | 2,1 bn euro |
| Health for Growth | 327 m euro | | Health Programmes | 322 m euro |
| Creative Europe | 1,5 bn euro | | Culture and Med's Programme | 400 m euro+ 755 m euro |
| Territorial cooperation (interregs) | 8,9 bn euro | | Territorial comparation (Interregs) | 8,7 bn euro |

Source: (Pascoe, 2013)

The analysis of the needs for financial instruments in the EU Strategy for the Danube Region identified a reasonable amount of gaps (Marlene Hahn, 2014) available for clusters development too:

- Financial resources are arguably limited, especially addressing capacity building projects and Technical Assistance as well as very small projects (under 200.000 EUR).
- Incompatibility of regulations for funding instruments in the Member States and outside the EU (IPA, ENPI) inhibiting cooperation across some Danube Region Countries.
- Bureaucratic barriers, such as administrative burden, timing of calls lack of qualified/ experienced staff, etc.

- The lack of pre-financing poses major challenges for many applicants who have to finance preparation and implementation from their own resources until reimbursed, frequently after more than 6-8 months.
- Co-financing involves complex process everywhere, and it has become increasingly difficult especially in the context of the economic recession.
- (Very) small projects face significant difficulties in finding the appropriate funding mechanism and overcoming administrative barriers.
- Project preparation requires further support given that the study has demonstrated that the large majority of planned projects are still at conception stage or face difficulties in being launched.
- Information about financing opportunities is insufficiently well disseminated.
- The commitment of Danube Countries to the EUSDR is unevenly distributed in the Danube Region.

4. Conclusion

The result of discussions between strategic working group and representatives of public bodies, some policy recommendations about the necessary steps to developing clusters as tool for more innovation and competitiveness and to support the financial resources management have emerged, including (Working Group for Cluster of Excellence in PA8, 2013):

- *use clusters to enhance knowledge in SME in key enabling technologies* - the enhancing of knowledge transfer to prepare the new emerging markets to answer to the changes in the area of demography, energy and climate, is a new challenge;
- *integrate clusters of SME and applied research in regional smart specialization strategies* - the new 2020 value chains can be established by using investments wisely, following current day knowledge and joining forces between partners in the east and west;
- *create environments for new demand-driven cluster initiatives of research, industry and users from different sectors and technology fields to find new ways of collaboration* - clusters will need to react on societal challenges and create cross-cutting environments where industry, market players and technology experts join forces in a new systemic approach;
- *use cluster initiatives for transnational value chains across the Danube Region* - in the case of the clusters which are not mature enough, new cluster concepts, oriented towards the societal challenges can lift clusters to a new level of innovation, fostering the transnational value chains, from research to technological development to implementation and market access;

- *generate tools to enhance cluster excellence* - though, together with the other actions, supporting the achievement of a Danube Region Cluster Accreditation and Evaluation System and the development of a Danube Region Cluster Management Training
- *flexible programming and combination of funds* - because of the reality that the concrete action and budget allocations for the developing and implementing innovative approaches cannot be fully determinate two years in advance; starting with 2014, DG Research and Innovation (HORIZON 2020), DG Industry and Enterprise (COSME) and DG Regional Policy (ERDF and related transnational INTERREG Programmes) integrate funds for cluster development, internationalization or innovation support.

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