



Cluster policies (in Europe)

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Cluster and global markets

- Why do firms of some regions succeed and firms of other regions fail in international competition?
- Why a region becomes the home base for successful international competitors in an industry?



Oracle Headquarters, Silicon Valley

What is a cluster?

Clusters are **networks** within some **regional proximity** of interconnected companies, specialized suppliers, service providers, firms in related industries and associate intitutions in particular fields that compete but also cooperate (Porter, 1998).

The cluster is part of main policies to enhance economic growth via industrial development and R&D promotion.

Benefits of a cluster:

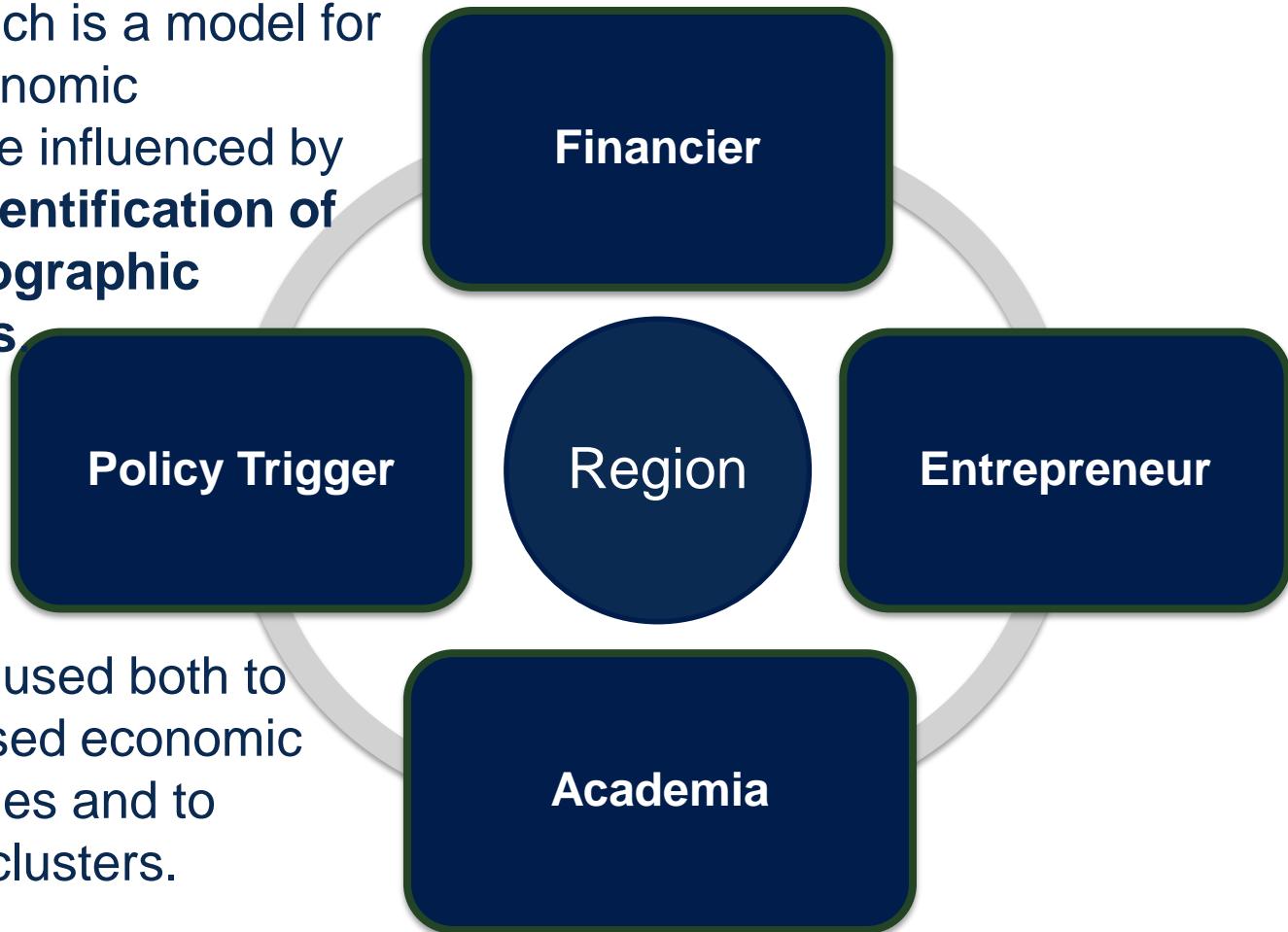
Increases firms' efficiency

Increases innovation

Increases business formation

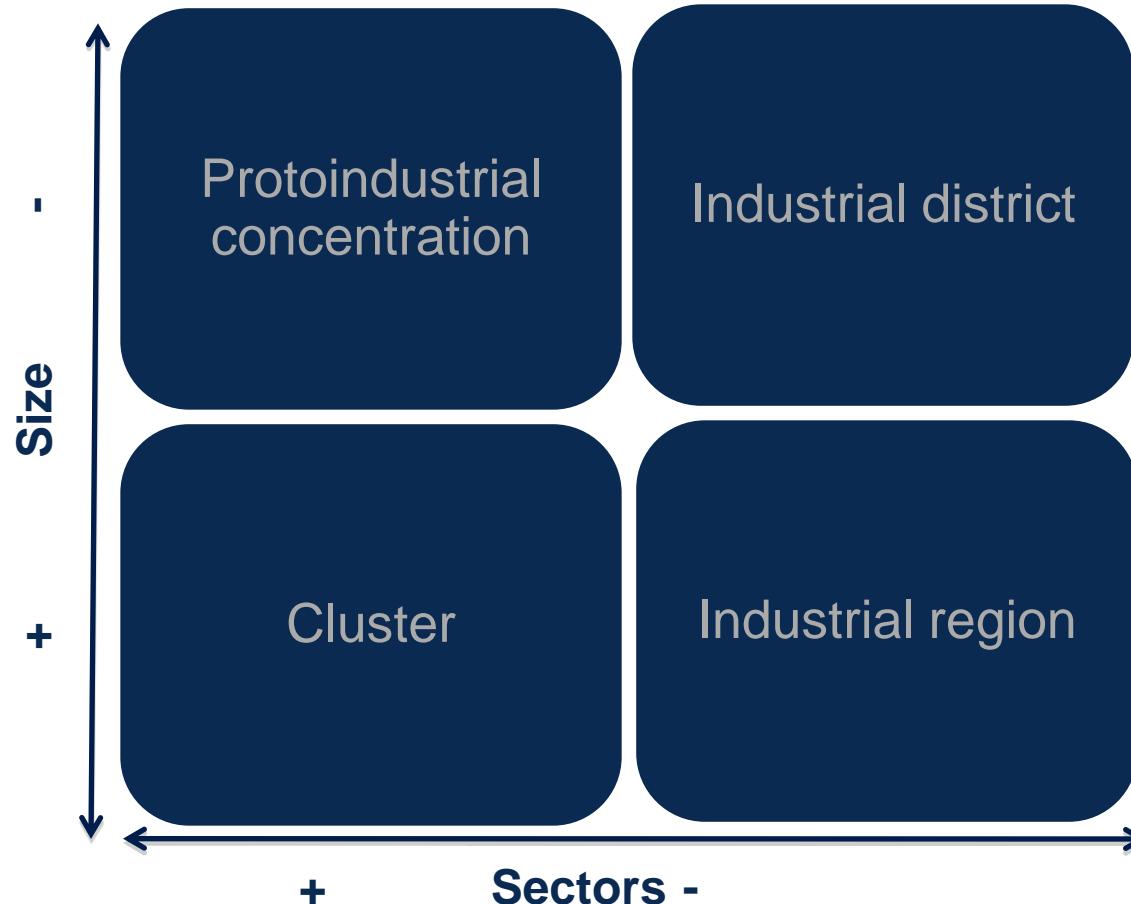
What is the Cluster Approach?

The Cluster approach is a model for explaining how economic development can be influenced by **comprehensive identification of economic and geographic interdependencies**.



The model can be used both to **design** cluster-based economic development policies and to **evaluate** existing clusters.

Concentration: Typology





Main question

How does (European) integration effect the equilibrium location of an industry?

Agglomeration and dispersion forces.
(Example)



The model (1/2)

- Risk averse firm; two locations; costs of location are risky;
- uncertain net returns; correlation;
- share of investment to region 1 and 2 ($s; 1-s$)



The model (2/2)

s

Share of Investment

$R_1 = R_2 = R$

Return

$Sd_1 = Sd_2 = Sd$

Risk

$a > 0$

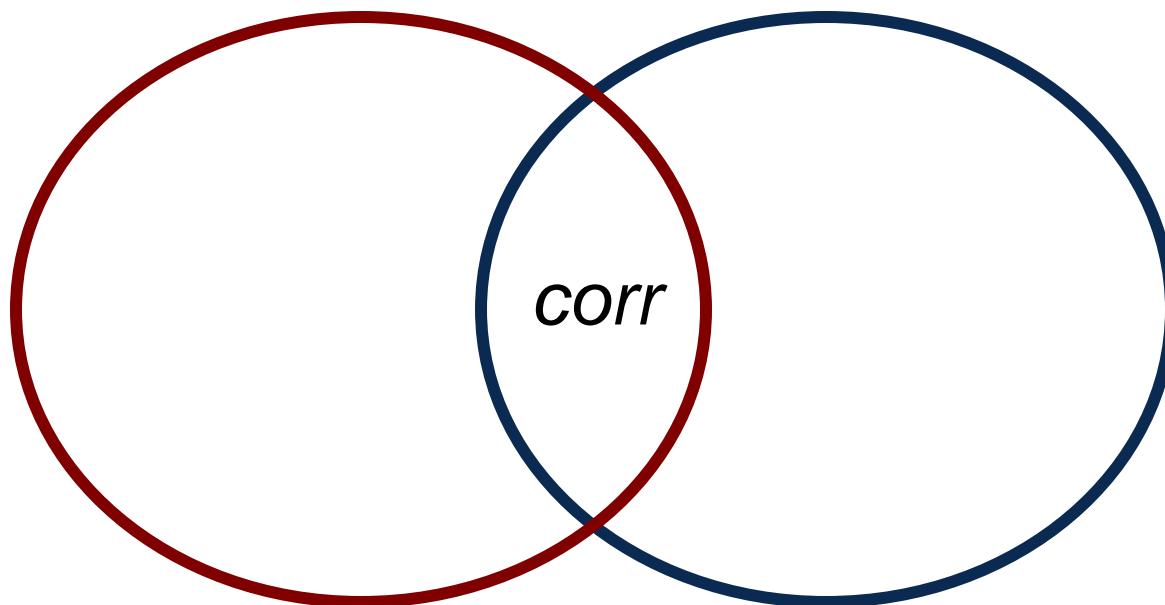
Risk aversion

corr

correlation



EU integration and correlation





Policy

with perfect symmetry: $s^* = 1/2$

$$E(C_2) > E(C_1)$$

Assume - expected costs of location are managed by government policy in one region.



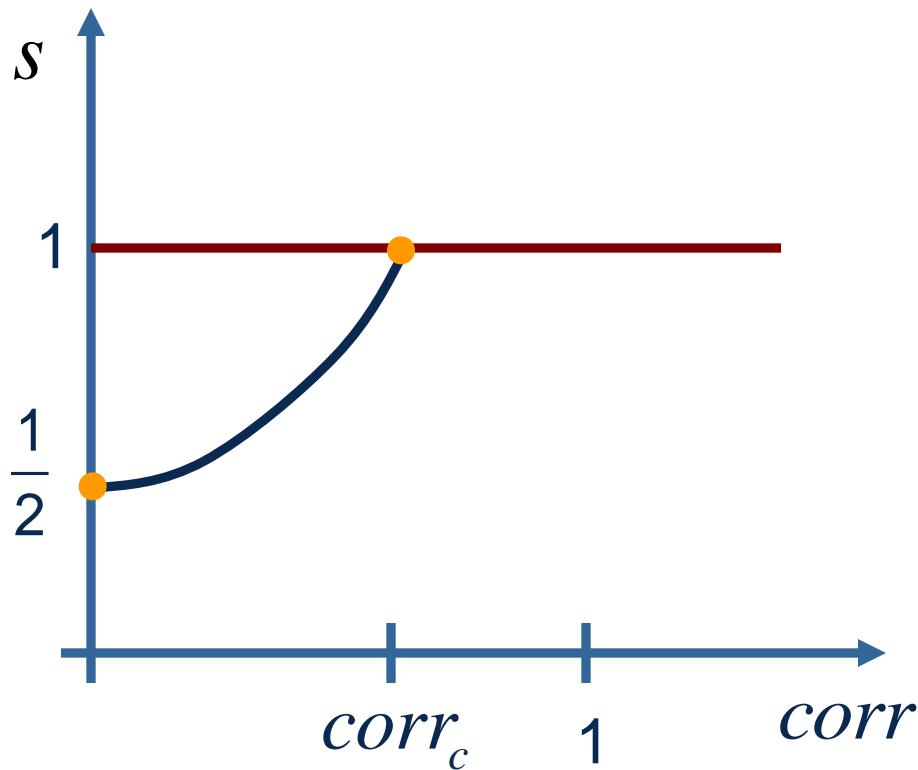
Optimum

$$s^* = \frac{1}{2} + \frac{E(C_2) - E(C_1)}{aRSd(1 - corr)} > \frac{1}{2}$$

s^* is increasing in corr
(integration)



Agglomeration





Location

Agglomeration force (corr)

and

dispersion force (a, R, S_d)



Summary

Result:

- We demonstrate that greater integration within a union may induce more agglomeration of resources instead of regional diversification.

Annexe 1

Evolution of region-based development concepts

