

# Competitiveness of Regions and Clusters: Implications for the Construction Industry

Christian H. M. Ketels, PhD  
Institute for Strategy and Competitiveness  
Harvard Business School

*Medellin, Colombia*  
2 November 2007

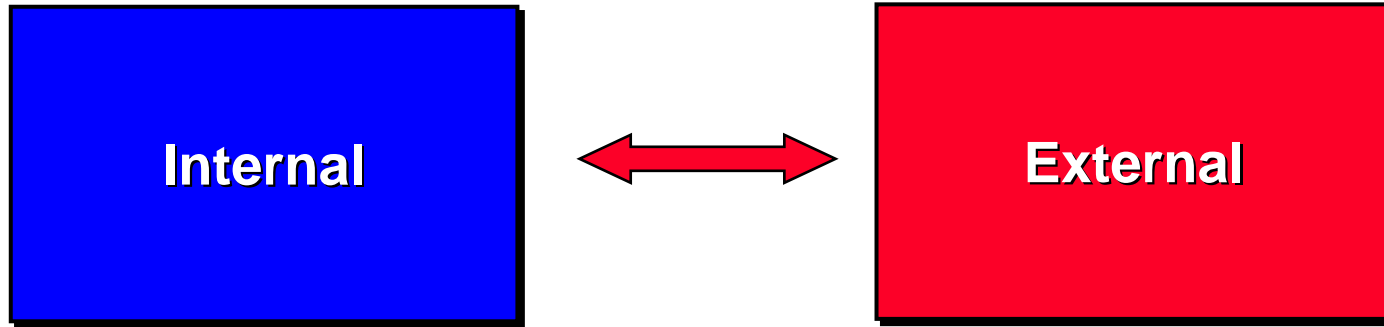
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This presentation draws on ideas from Professor Porter's articles and books, in particular, The Competitive Advantage of Nations (The Free Press, 1990), "The Microeconomic Foundations of Economic Development," in The Global Competitiveness Report 2006, (World Economic Forum, 2005), "Clusters and the New Competitive Agenda for Companies and Governments" in On Competition (Harvard Business School Press, 1998), and the "Cluster Initiative Greenbook" by C Ketels, O Solvell, and G Lindqvist. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means - electronic, mechanical, photocopying, recording, or otherwise - without the permission of the author.

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# Perspectives on Company Performance



- Competitive advantage resides solely **inside** a company or in its industry
- Competitive success depends primarily on **company choices**
- Competitive advantage (or disadvantage) resides partly in the **locations** at which a company's business units are based
- **Cluster participation** is an important contributor to competitiveness

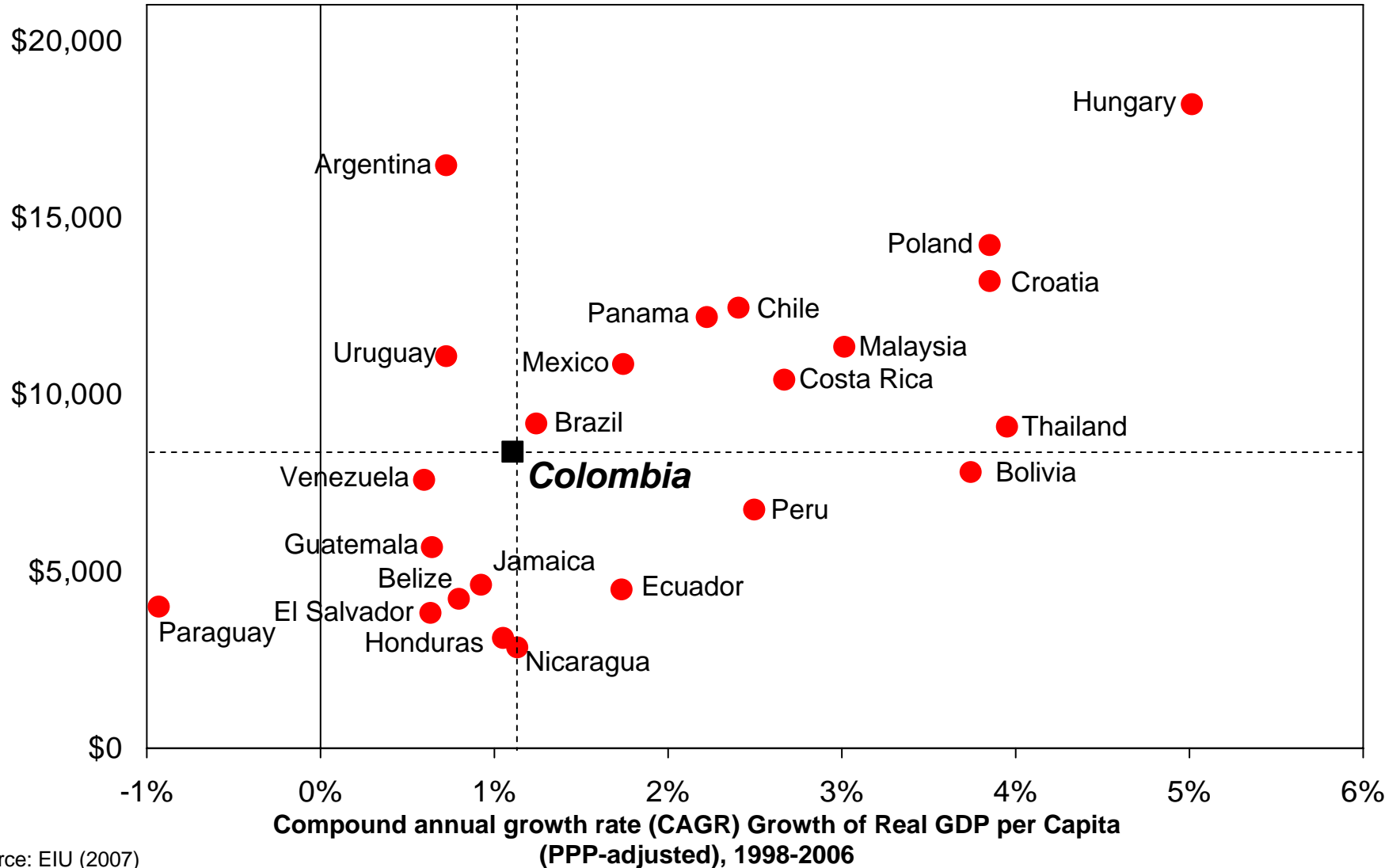
# Themes

- **The concept of competitiveness**
- **Competitiveness in construction**
- **Regional cluster development**

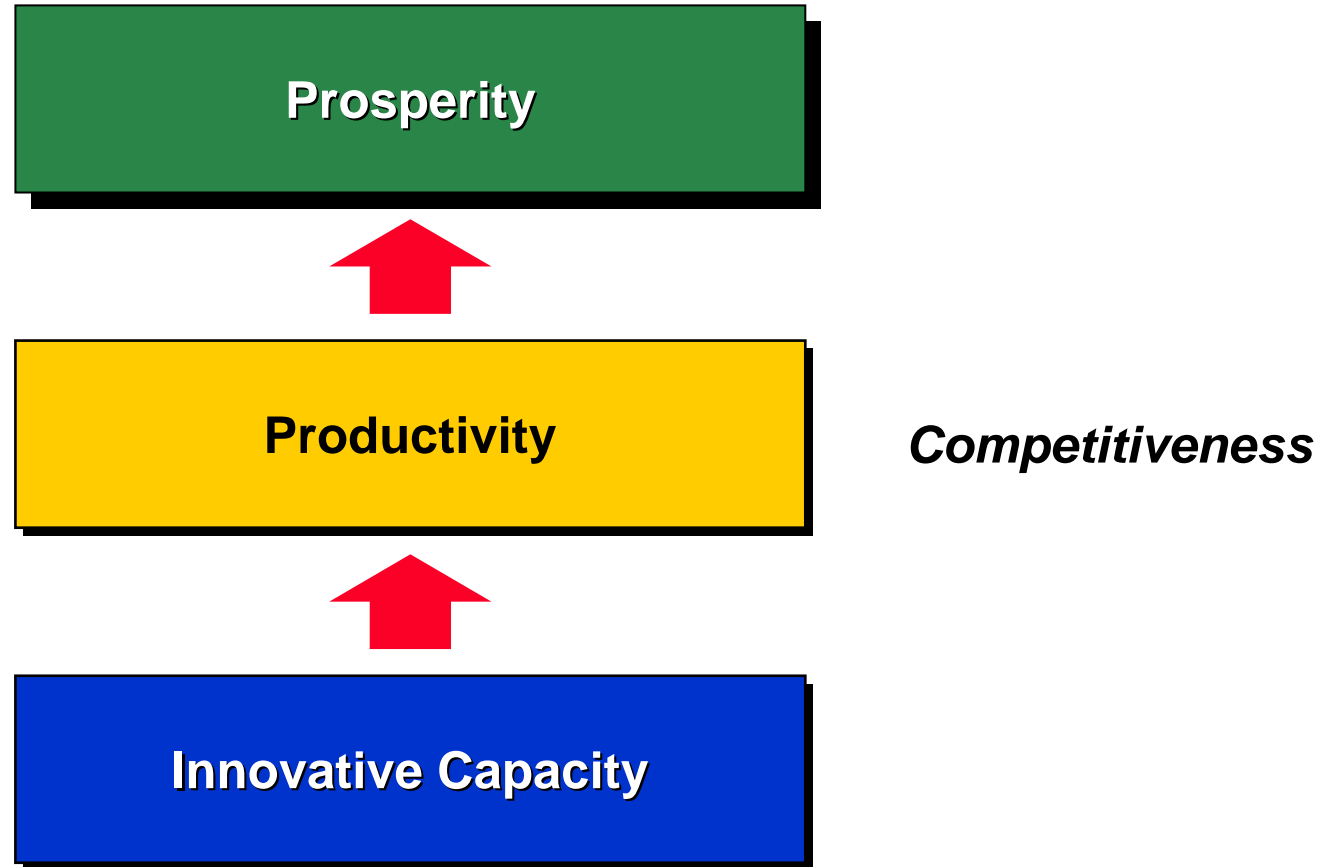
# Prosperity Performance

## Selected Countries

GDP per Capita  
(PPP adjusted), 2006



# What Creates Sustainable Prosperity?



# Determinants of Competitiveness

Macroeconomic, Political, Legal, and Social Context

## Microeconomic Competitiveness

The Sophistication  
of Company  
Operations and  
Strategy



The Quality of the  
Microeconomic  
Business  
Environment



State of Cluster  
Development

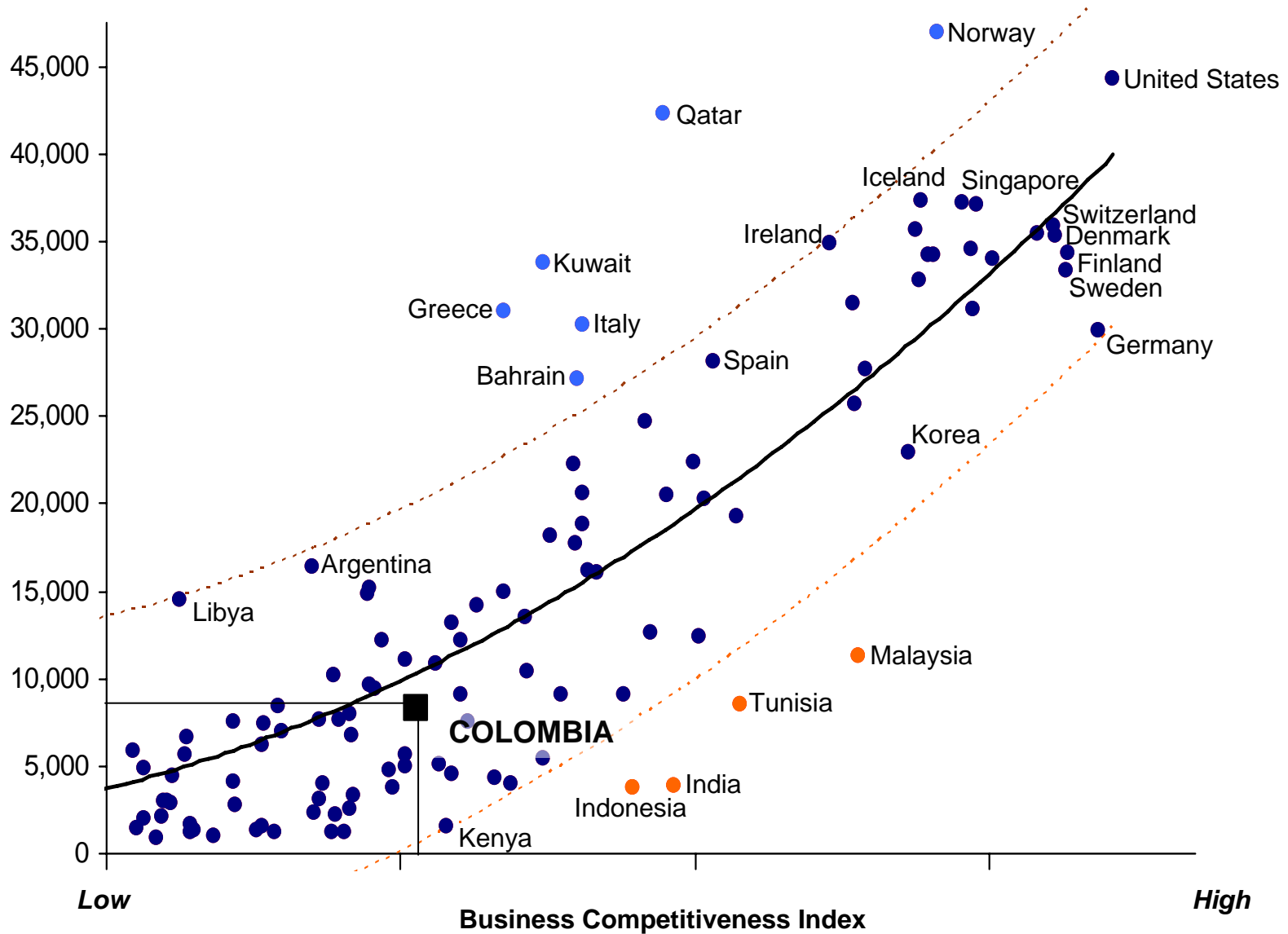


Endowments (Natural Resources, Location)

- Endowments and a sound context creates the potential for competitiveness, but are **not sufficient**
- Competitiveness ultimately depends on improving the **microeconomic competitiveness** of the economy

# Business Competitiveness and Prosperity

2006 GDP per Capita  
(Purchasing Power Adjusted)



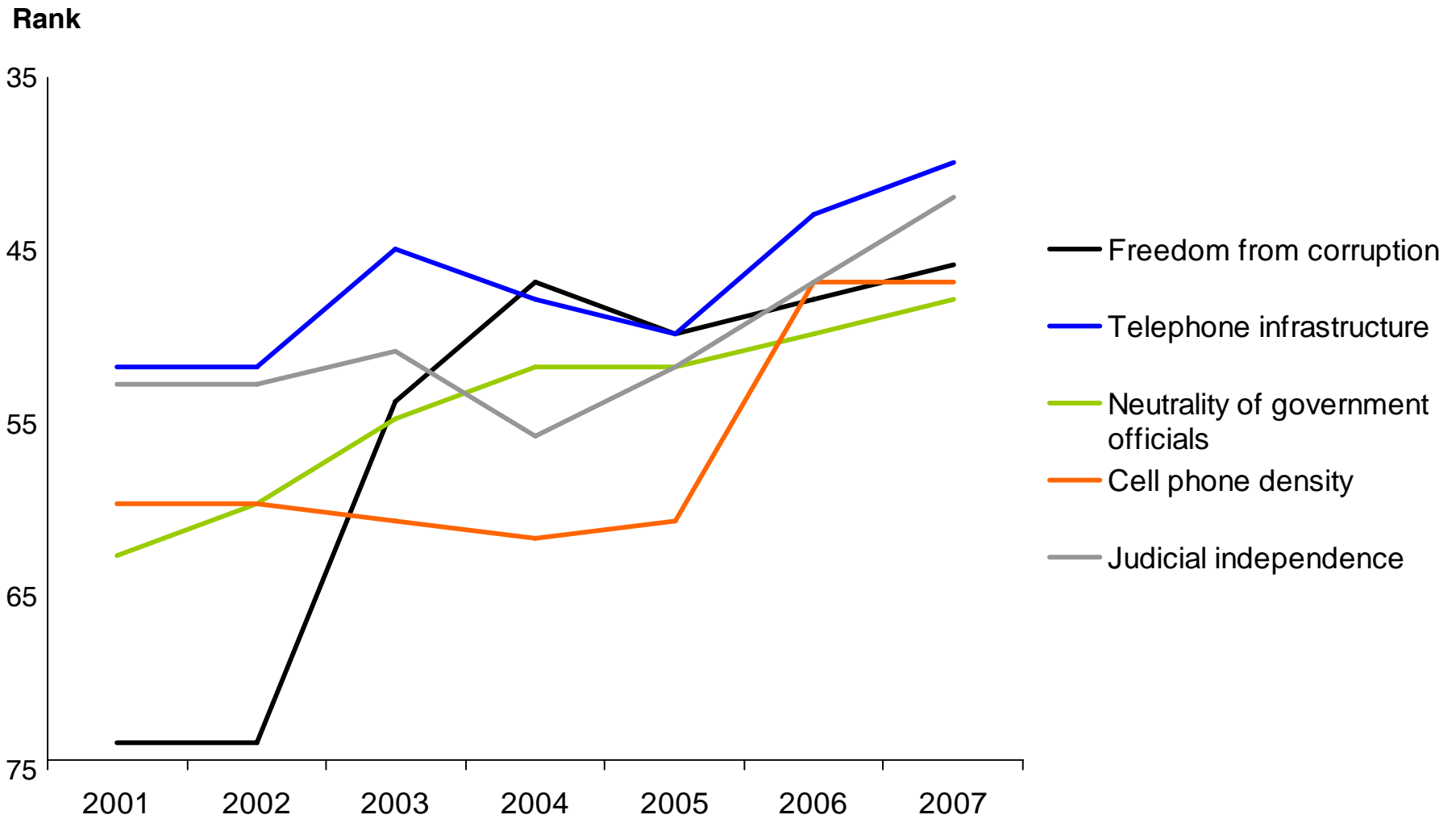
Source: Global Competitiveness Report 2007

# Colombia's Position on Competitiveness and Context

	BCI Rank	Context and Endowment Rank	Political System	Accessibility	Neighborhood	Natural Resources
United States	1	8				
Germany	2	4				
Finland	3	6	+++			
Sweden	4	7	++			
Denmark	5	2	+	++		+
Costa Rica	40	34		++	--	
Sri Lanka	41	52	--			-
Greece	42	36				
Latvia	43	38				
Poland	44	40				
China	45	64	--			-
Panama	46	44		++		
Brazil	47	47				
Croatia	48	43		++	-	
Morocco	49	53				
Mexico	50	48			++	
<b>Colombia</b>	<b>51</b>	<b>67</b>	-			
Philippines	52	58	-	++		-
Guatemala	53	57				
Uruguay	54	41				
Russia	55	68	-	-		
Kazakhstan	56	55		--		+
Trinidad and Tobago	57	39		++		+++
Peru	58	60				

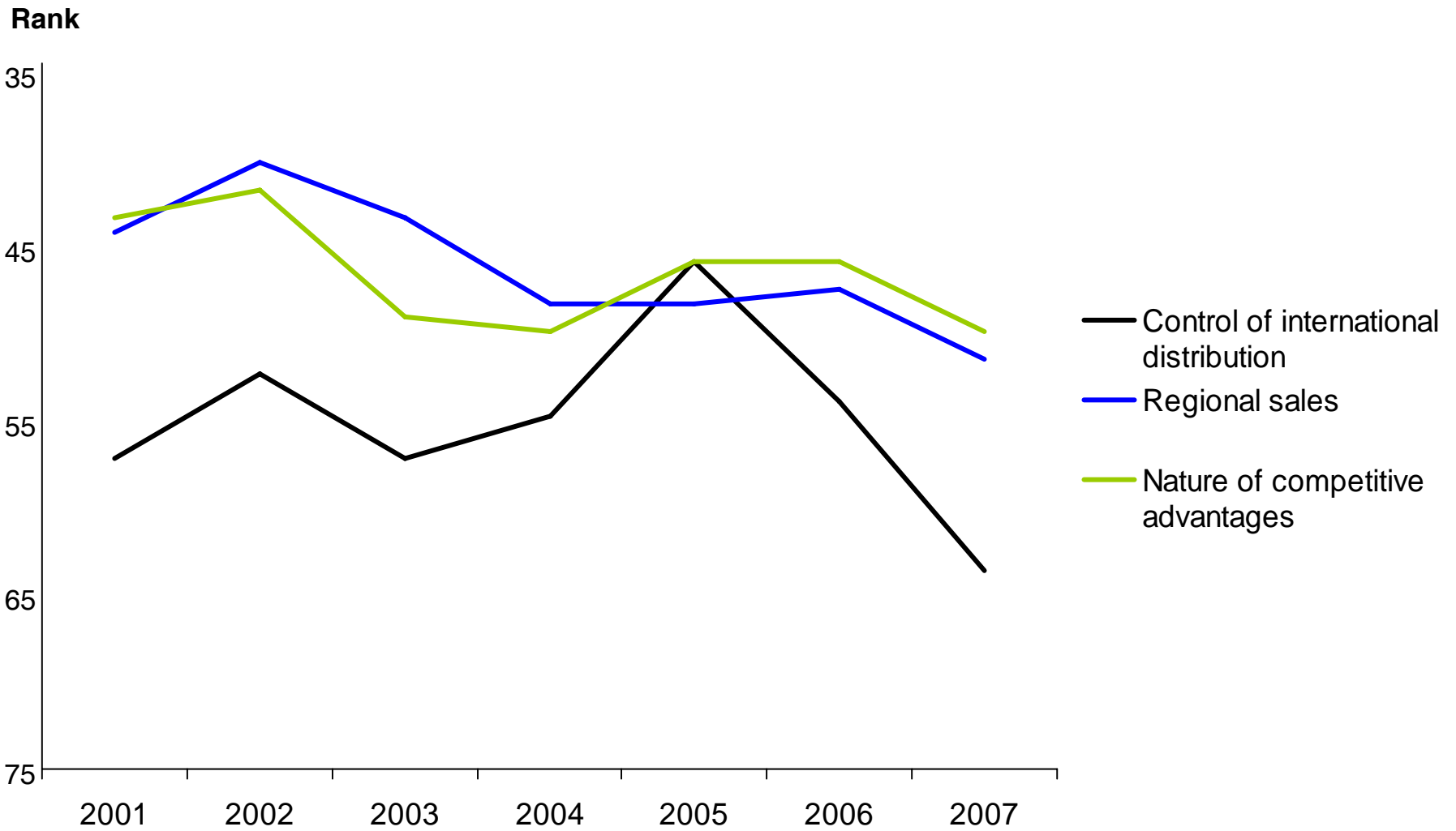
# Colombian Business Competitiveness

## Main Improvements over Time



# Colombian Business Competitiveness

## Main Deteriorations over Time



# Colombian Competitiveness 2007

- Colombia has registered **solid economic performance** in the last few years
- This success has been driven by **significant improvements** in the country's context and in elements of its competitiveness; it has also benefited from a **benevolent global economic environment**
- The **slightly deteriorating competitiveness rankings** of the last two years are a sign that a new stage of economic development needs to be reached
- The country needs to solidify the improvements in context while moving towards a **deeper level of microeconomic upgrading**

# Selected Growth Models Globally

## Eastern Europe

- Proximity to European markets
- Legacy assets
- EU institutions

## Ireland

- Language and location
- Positioning

## China

- Low-cost labor
- Huge home market
- Incentives for FDI

## Chile

- Natural resources
- Domestic rivalry
- Solid institutions

## Finland

- Knowledge
- Specialization

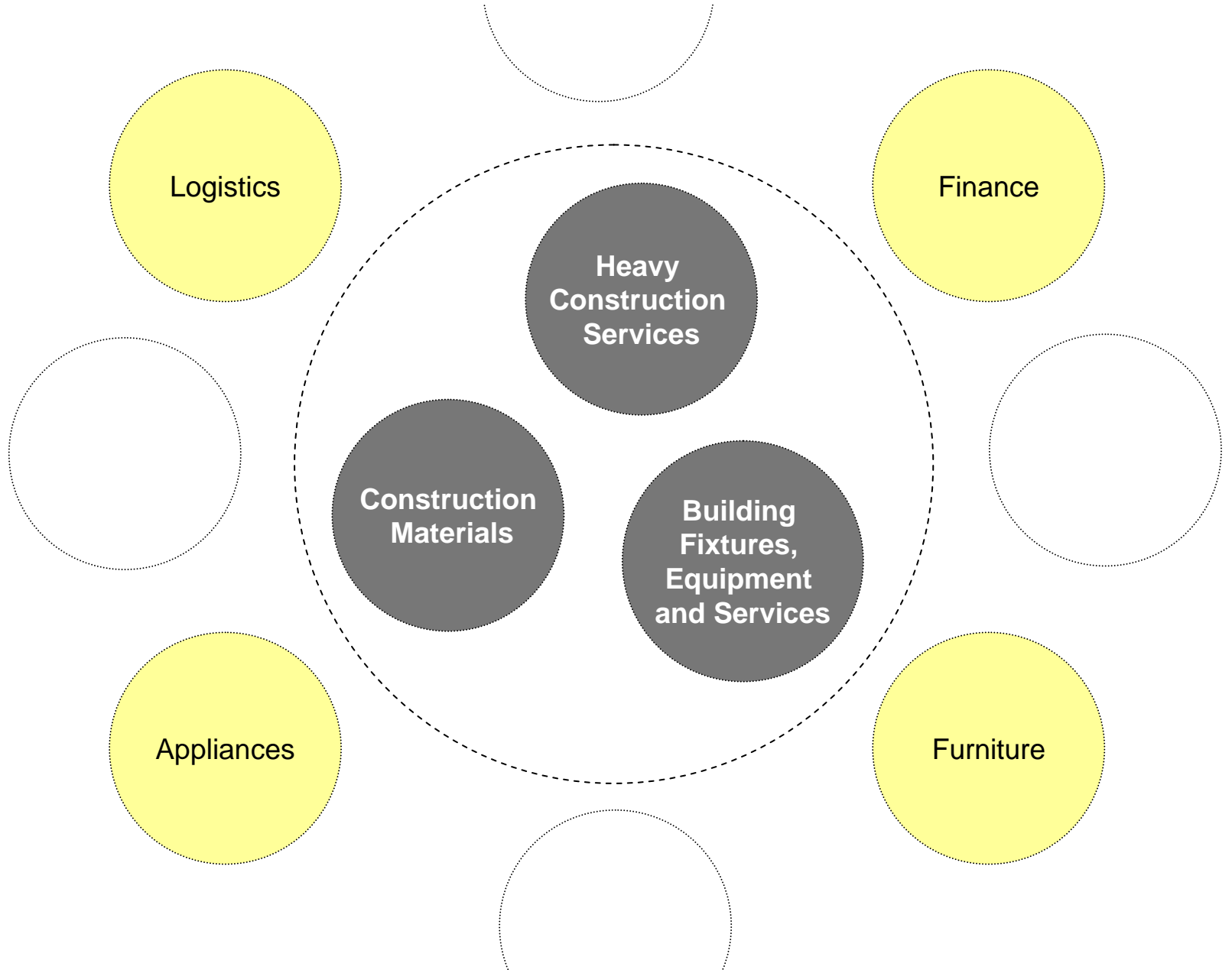
# Implications

- **Productivity is key**
- **There are no silver bullets**
- **A reinforcing set of qualities is crucial, not best practices per se**
- **Different levels of geography matter**
- **Locations need to tailor strategies to their particular circumstances**
- **Competitiveness increases through change at the company and cluster level**

# Themes

- The concept of competitiveness
- **Competitiveness in construction**
- Regional cluster development

# Elements of Construction



# Nature of Competition in Construction

**Across regions  
and countries**

*(Companies face different  
business environments)*

**Within regions**

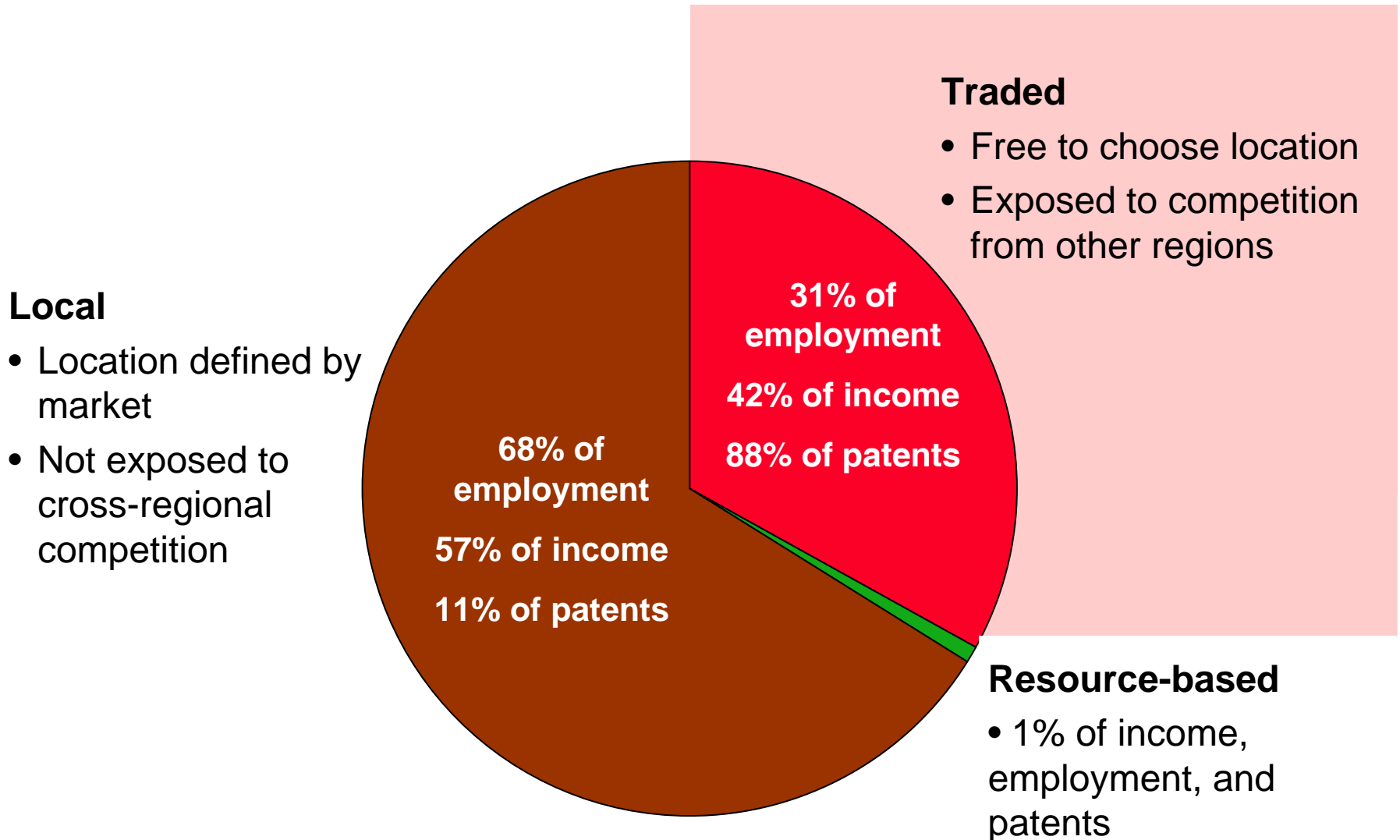
*(Companies face the same business environment)*

**FORMAL**

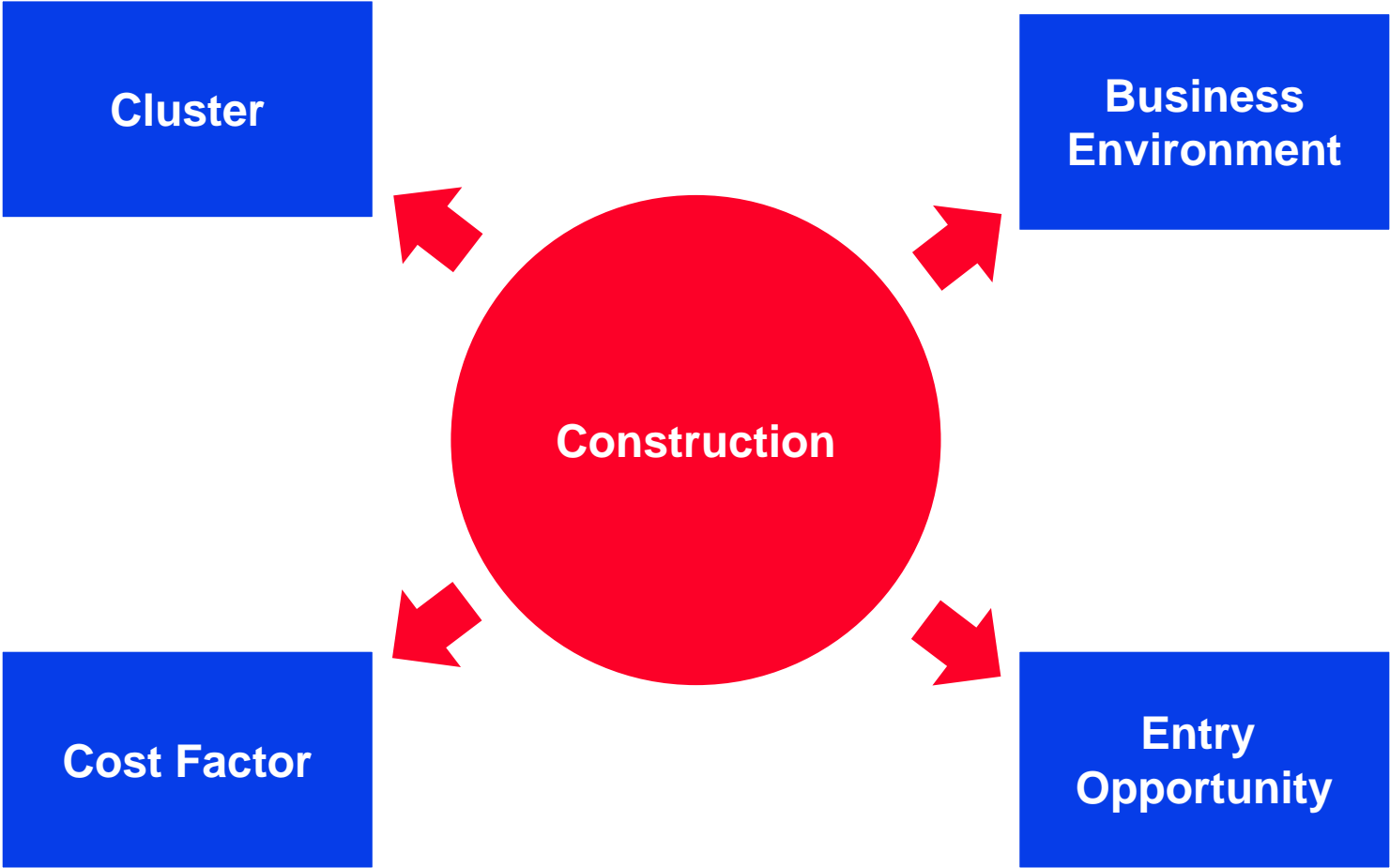
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# The Role of Clusters in Regional Economies

## USA

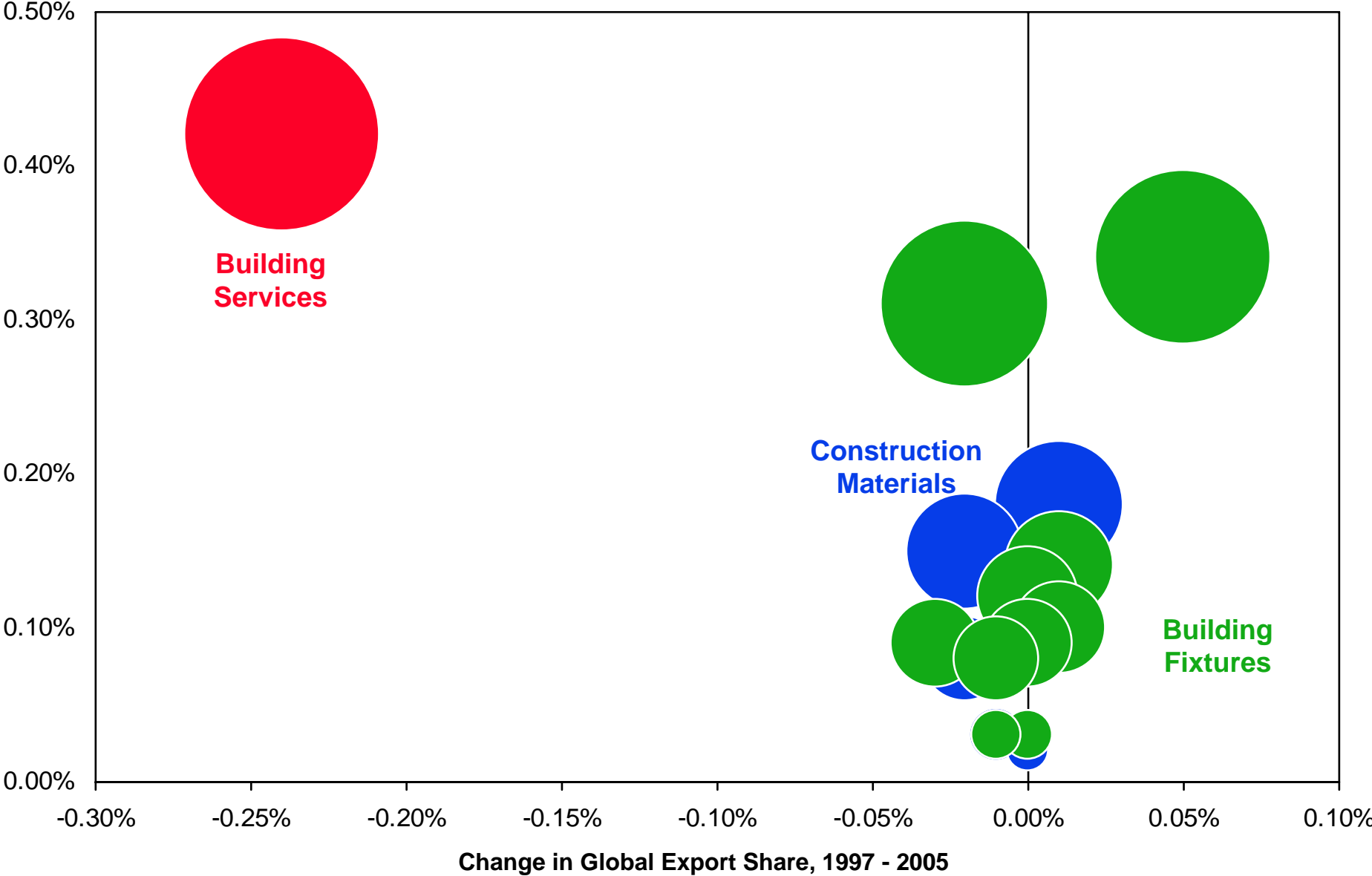


# Economic Impact of Construction



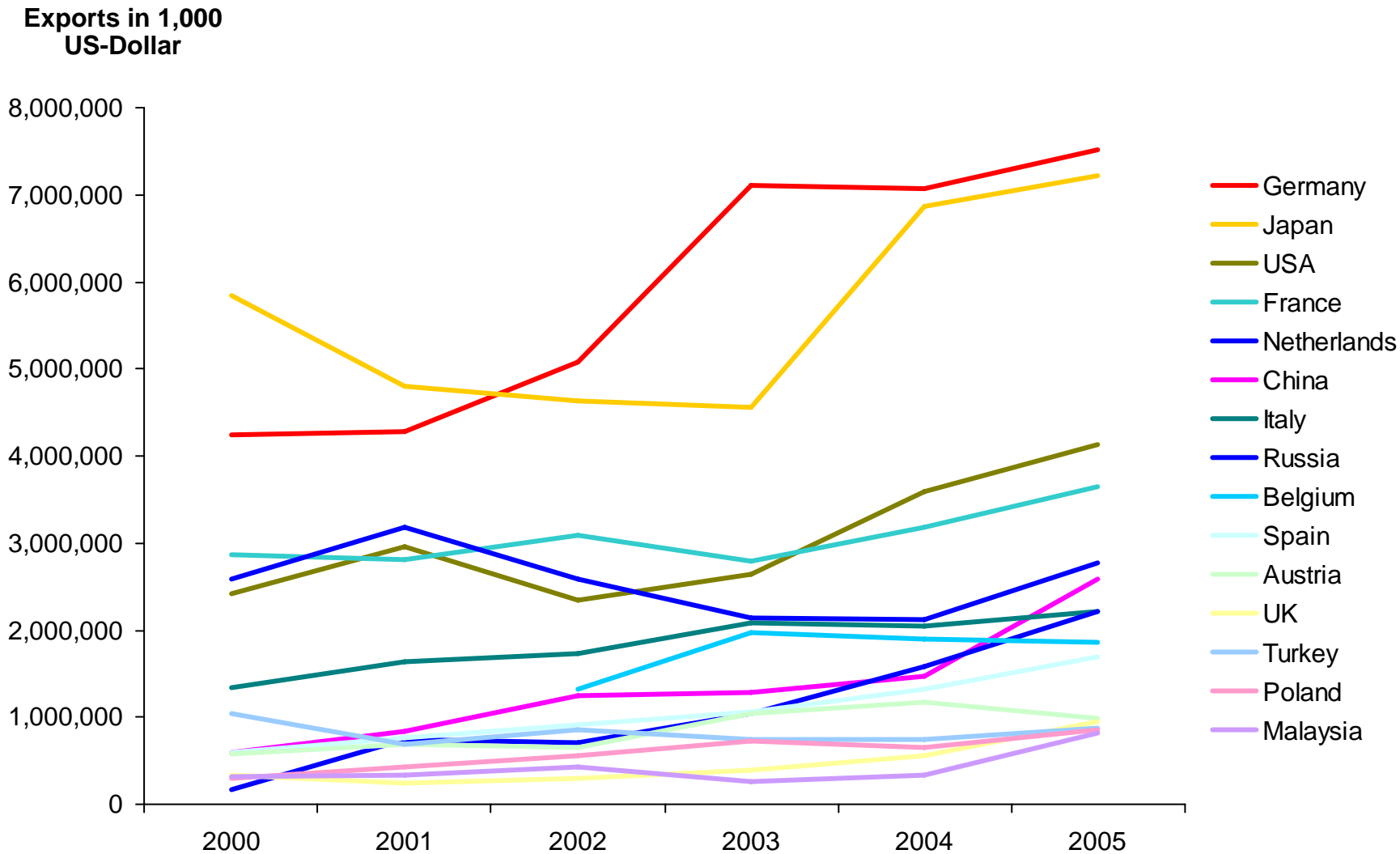
# Global Export Growth in Construction-Related Clusters

Share of global exports, 2005

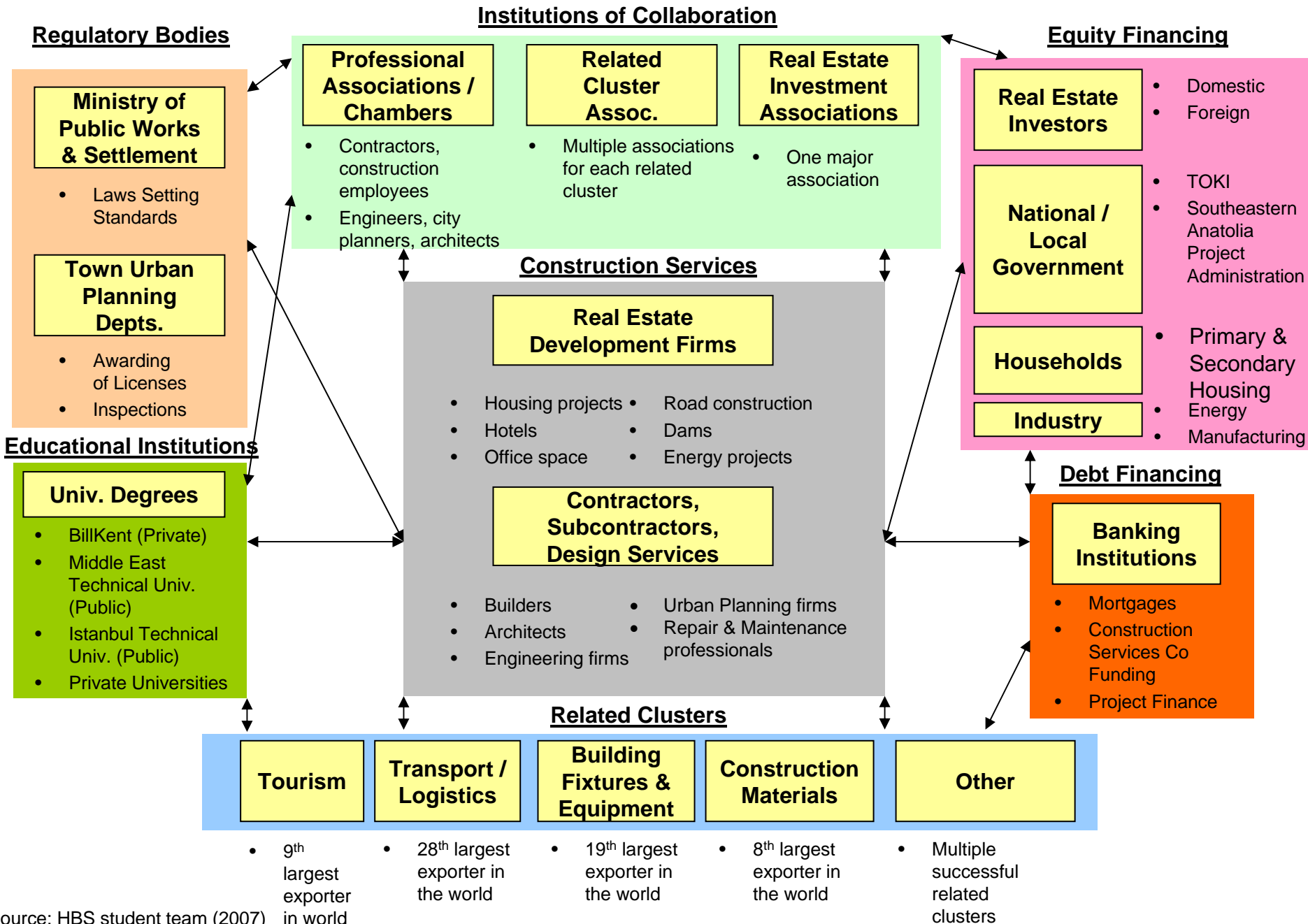


Source: ISC, Harvard Business School (2007)

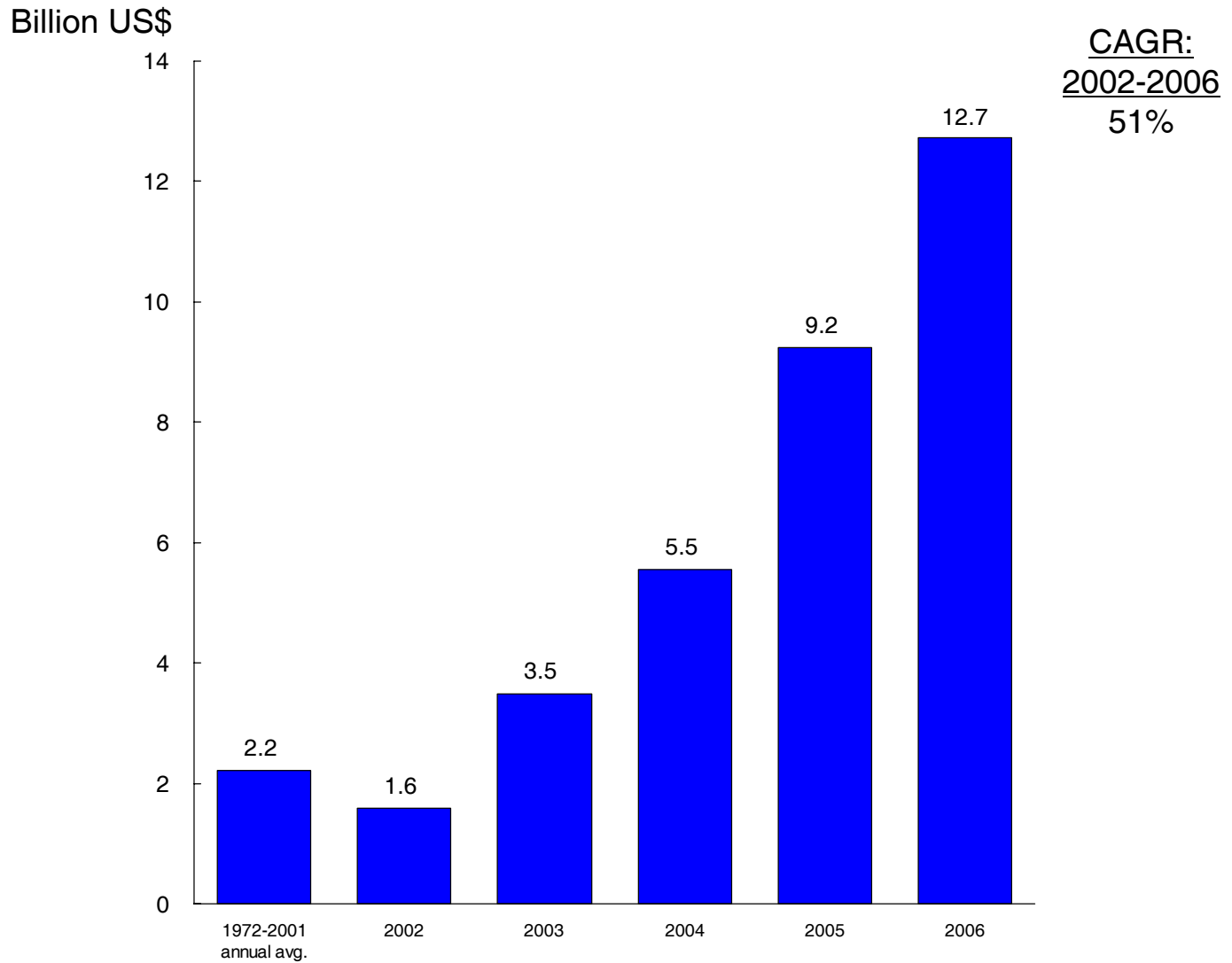
# Top Exporters of Construction Services



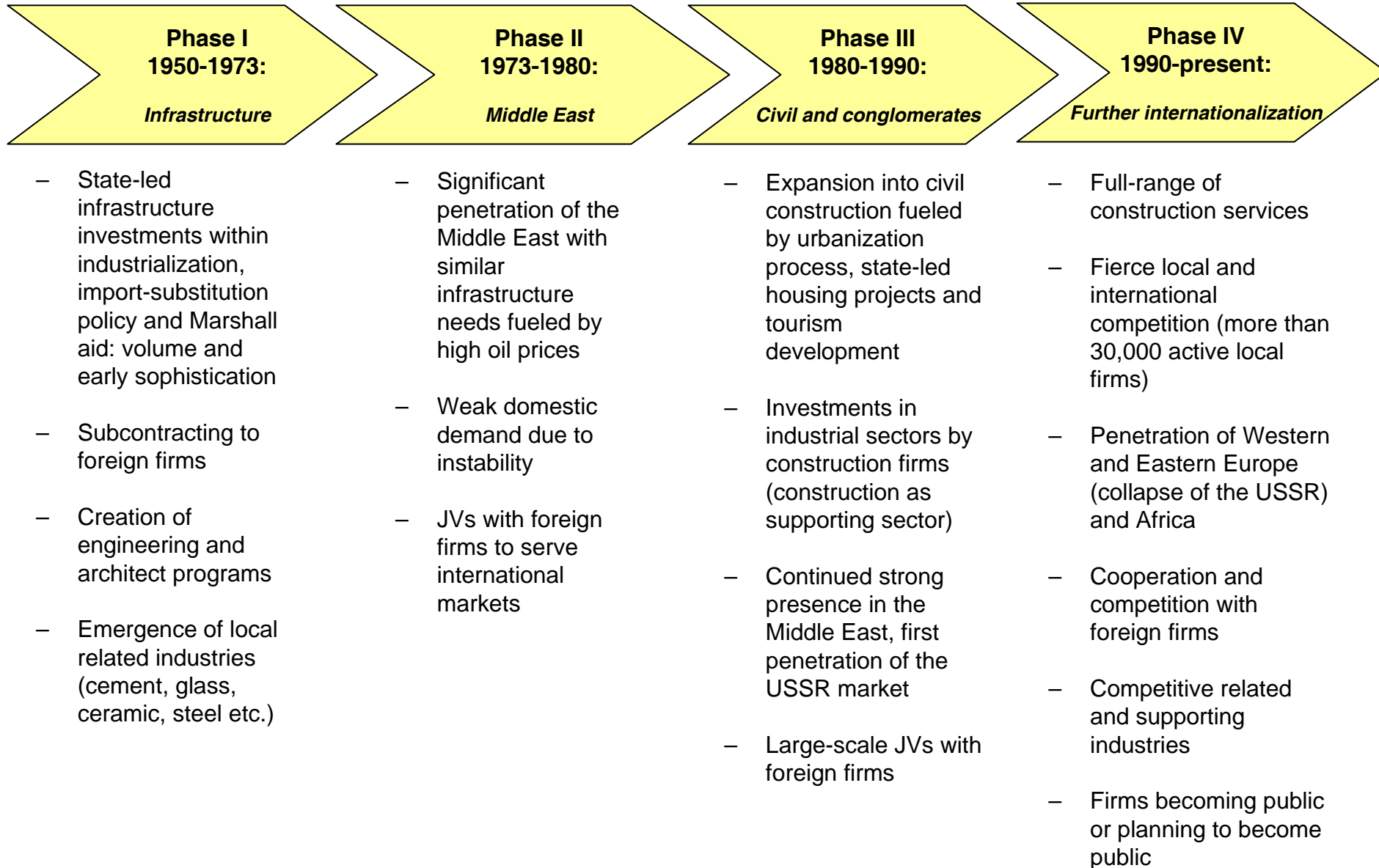
# Turkish Construction Services Cluster



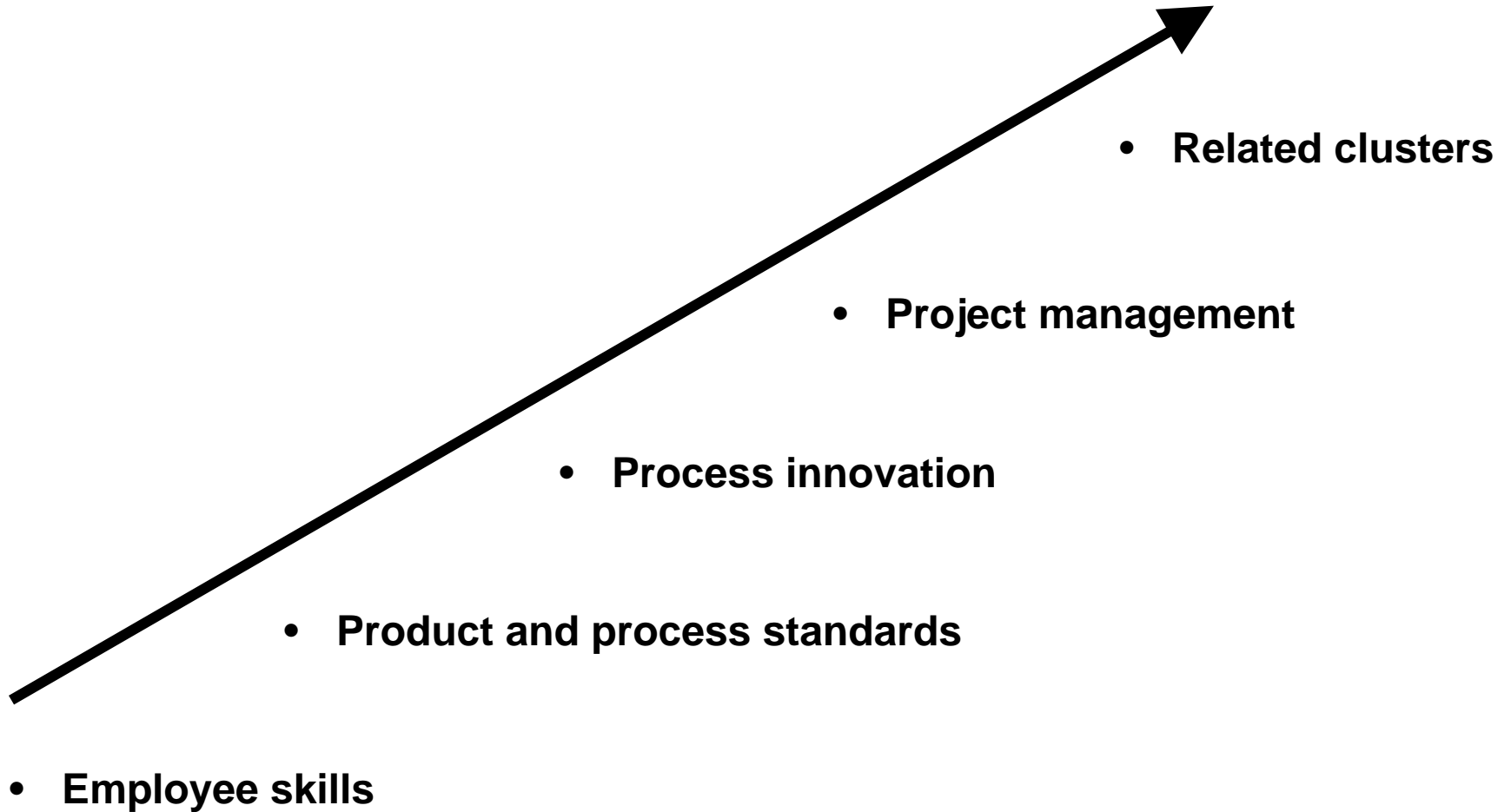
# International Construction Projects by Turkish Companies



# The Formation of Turkish Construction Services



# Key Issues for Construction Clusters



# Informality in the Construction Sector

## Reasons

- Natural*
- Easy entry
  - Fall-back opportunity
  - Base level of demand

*Policy-driven*

- Bureaucracy and corruption
- High volatility in the economy

## Effects

- No investment in skills
- No development of common standards
- Limited opportunities for process innovation



- Low-cost trap

## Reactions

- Reduce fiscal and administrative barriers
- Use clusters efforts to ease path into formality
- Set standards for public and private developers

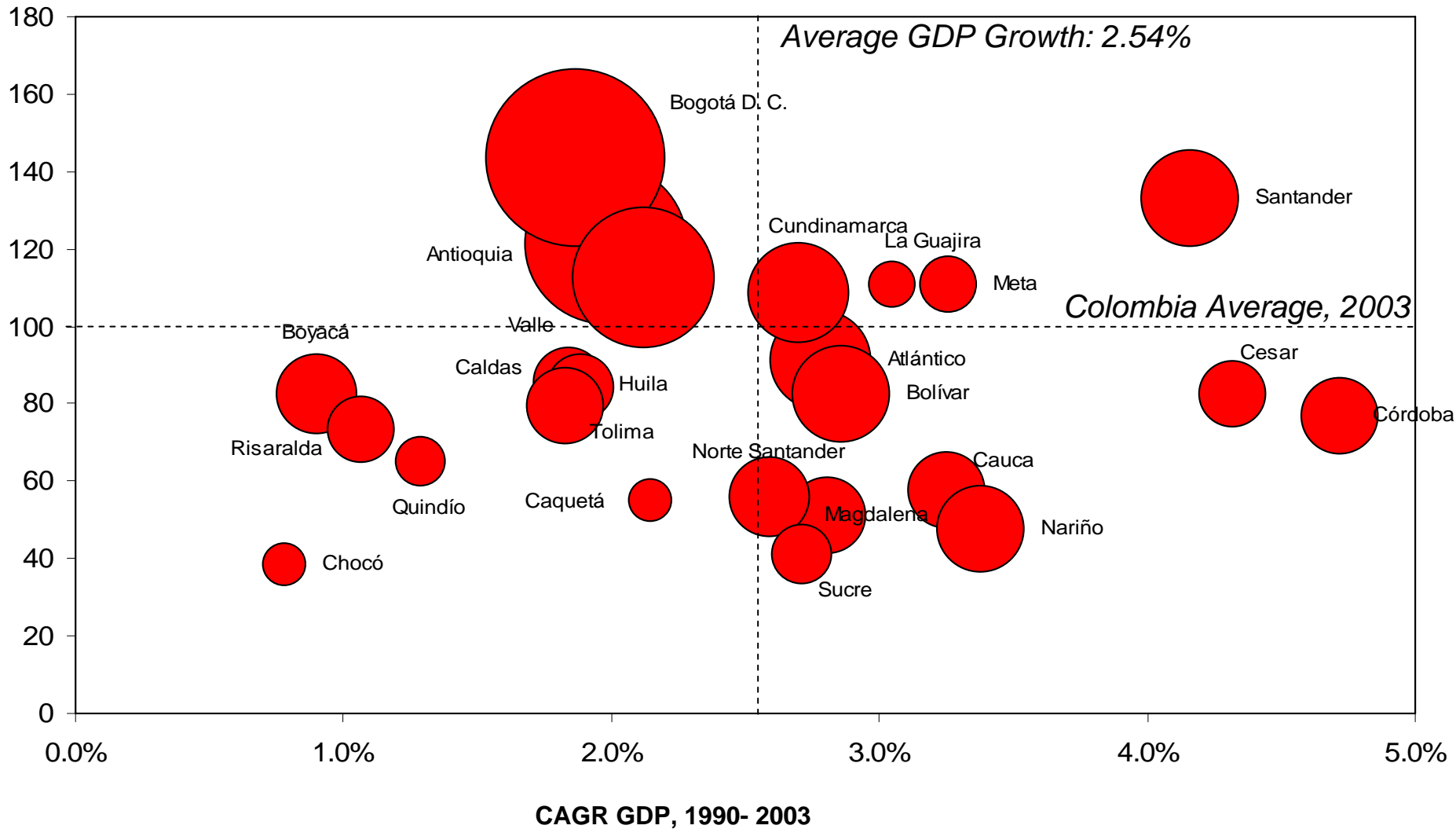
# Themes

- The concept of competitiveness
- Competitiveness in construction
- **Regional cluster development**

# Regional Economic Performance

## Colombian *Departamentos*

Region's GDP  
per capita, 2003



Note: Size of bubble is proportional to population  
Source: CEC - DANE, 2003.

# Clusters as Drivers of Regional Prosperity

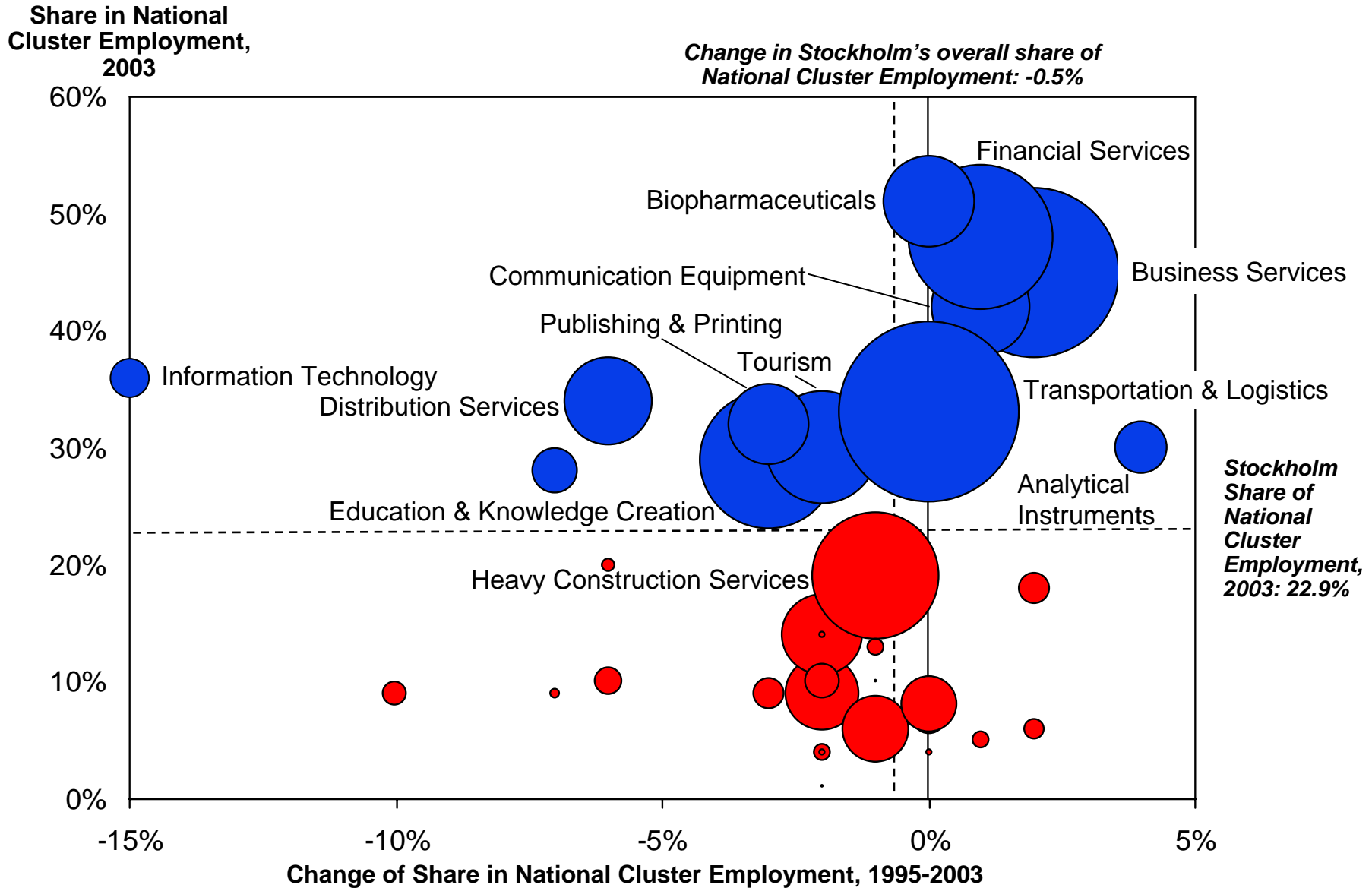
## Cluster

- Specialization in clusters
- Breadth of position in clusters
- Positions in related clusters
- Positions in clusters present in neighboring regions
- *NOT: Positions in High-Tech clusters*

## Other cluster-related factors

- Patenting intensity
- Number of patentors
- Economic size and density

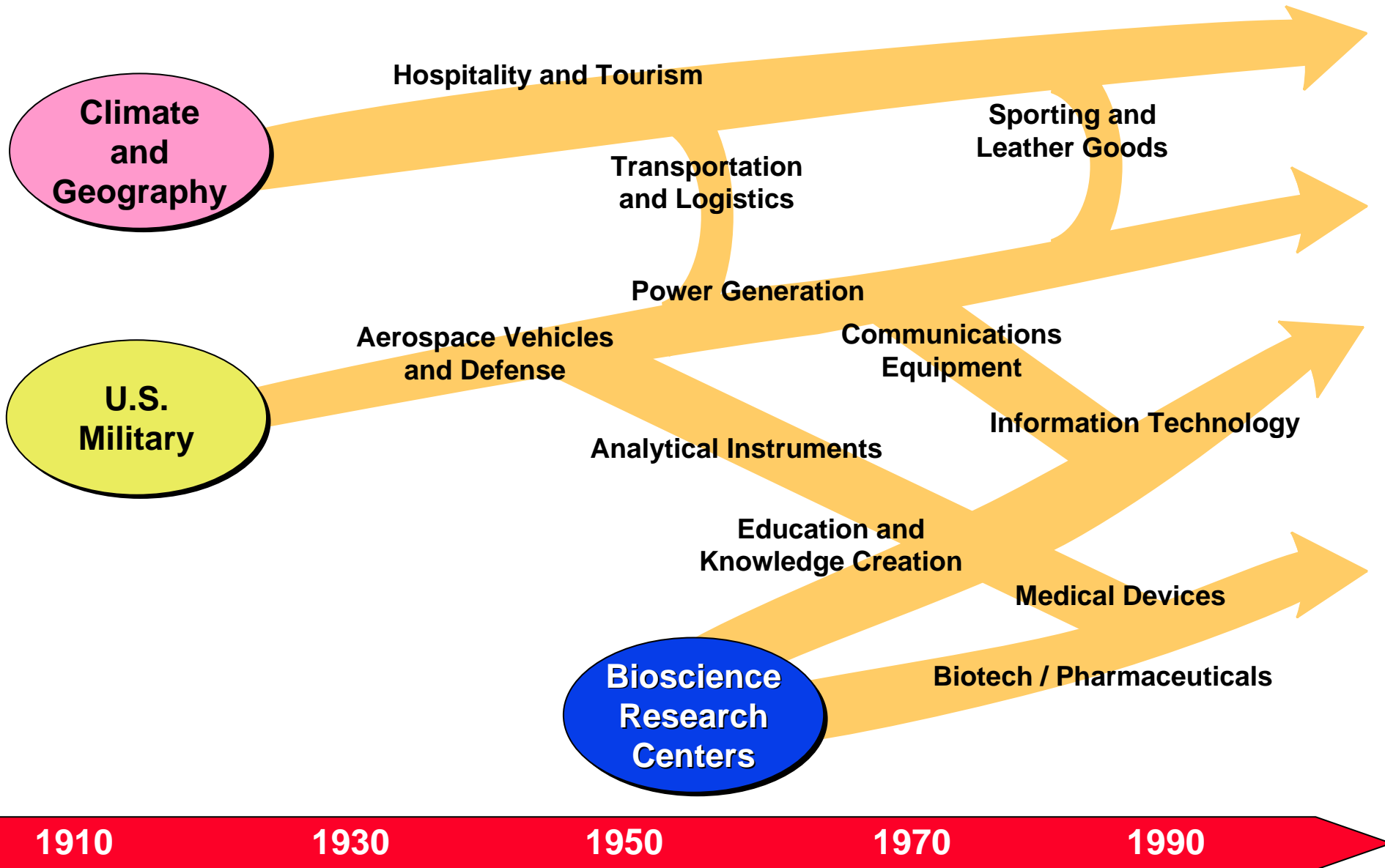
# Stockholm Region Cluster Portfolio



Note: Bubble size is proportional to employment levels  
 Source: Statistics Sweden (2005), author's calculations

# The Evolution of Economies

## San Diego



# The Impact of Globalization

## Cluster Specialization and Linkages

### Portugal

- Production
- Focus on short-production runs in the medium price range

### Romania

- Production subsidiaries of Italian companies
- Focus on lower to medium price range

### China

- OEM Production
- Focus on low cost segment mainly for the US market

### Italy

- Design, marketing, and production of premium shoes
- Export widely to the world market

### United States

- Design and marketing
- Focus on specific market segments like sport and recreational shoes and boots
- Manufacturing only in selected lines such as hand-sewn casual shoes and boots

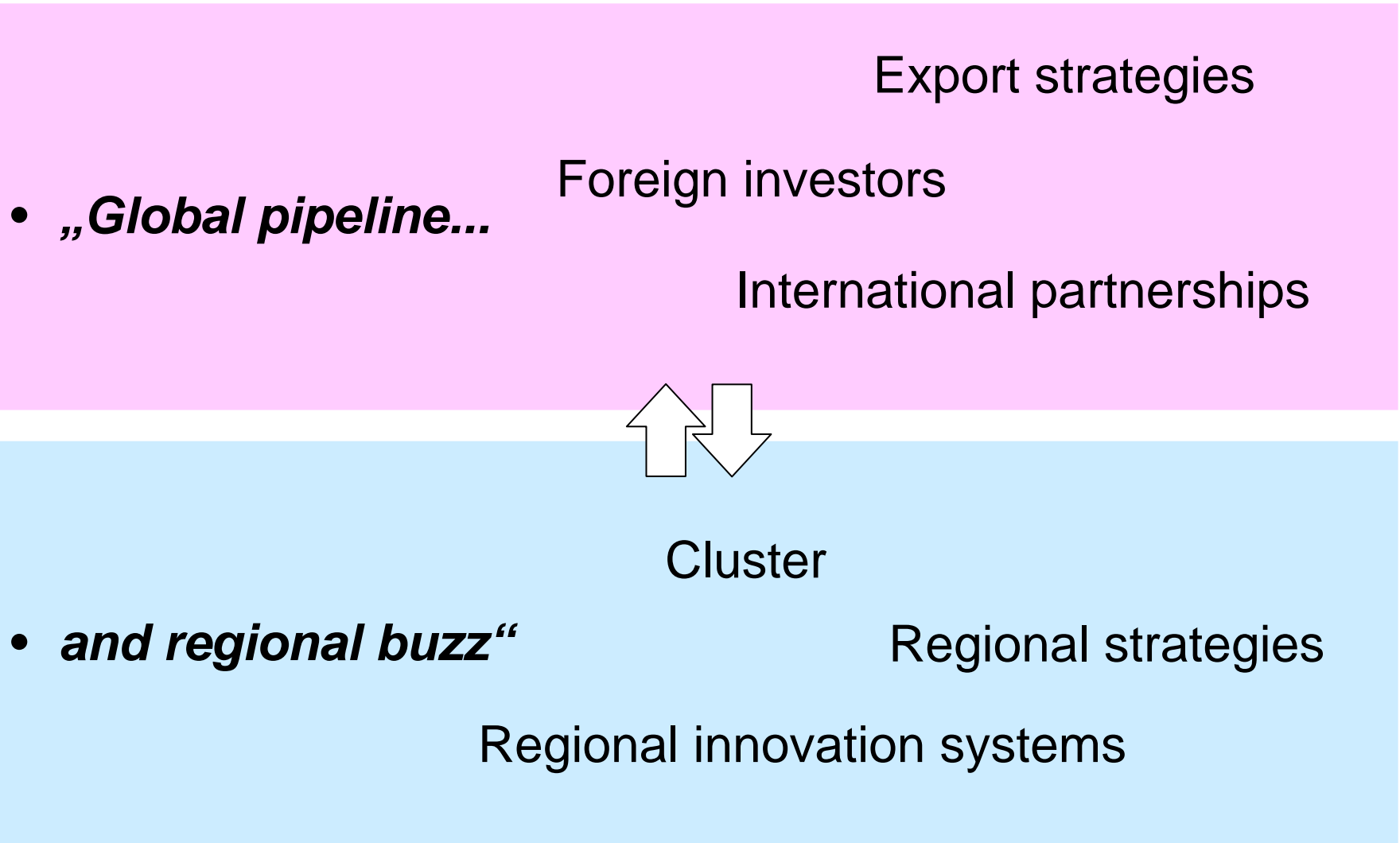
### Brazil

- Low to medium quality finished shoes, inputs, leather tanning
- Shift toward higher quality products in response to Chinese price competition

### Vietnam/Indonesia

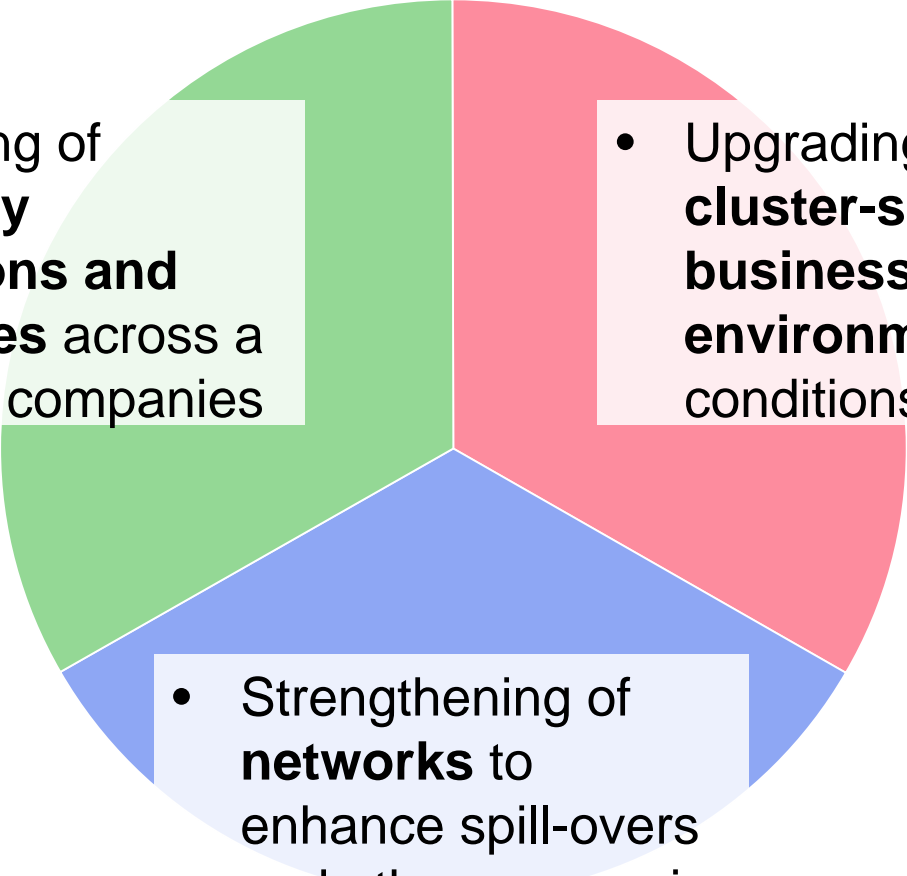
- OEM Production
- Focus on the low cost segment mainly for the European market

# Internationalization and Cluster Initiatives



# What are Cluster Initiatives?

Cluster initiatives are **collaborative activities** by a **group** of companies, public sector entities, and other related institutions with the objective to improve the competitiveness of a group of **interlinked economic activities** in a **specific geographic region**

- 
- Upgrading of **company operations and strategies** across a group of companies
  - Upgrading of **cluster-specific business environment** conditions
  - Strengthening of **networks** to enhance spill-overs and other economic benefits of clusters

# Company-Driven Regional Competitiveness Efforts

**Dow Chemical/BMW/...,  
Mitteldeutschland (Germany)**

*Ensure attractiveness for further  
investments by headquarters*

**Danfoss,  
Southern Jutland (Denmark)**

*Ensure availability of skills as  
company reduces manufacturing  
operations*

**Magna Steyr,  
Styria (Austria)**

*Ensure capabilities at  
regional supplier network*

**ENCE,  
Uruguay**

*Ensure social and economic  
sustainability of investment*

# Drivers of Cluster Initiative Success

## Setting

- Strong business environment
- Trust in government
- Strong regional government
- Cluster strength

## Objectives

- Broad range of objectives
- Objectives selected based on cluster's specific needs
- *No significant effect of special objectives*

## Process

- CI Facilitator with cluster insight
- CI has office and significant budget
- CI has clear strategy and measurable goals
- *No negative effect of government financing*
- *Negative effect of limiting participation*

# The Role of Government in Cluster Initiatives

## *Should not*

- Pick members
- Define action priorities

## *May...*

- Finance
- Initiate

## *Should...*

- Participate
- Be ready to implement recommendations

- Debates about the role of government are too often focused on which clusters should be supported and how much financing they should get



- **Cluster selection** is an important but ultimately **operative question**; focus is necessary to achieve impact and not all clusters have equal potential
- **Financing** is an important but cluster policy needs to be more; policy needs to improve the potential for companies to **increase productivity**

# Regional Cluster Portfolios

Instrument

- **Existing clusters**
  - Already meeting the market test with significant economic activity
- **Emerging clusters**
  - Becoming visible around individual companies and at borders of existing clusters
- **New clusters**
  - Start-ups and chance events create the seeds of emerging clusters

*Cluster initiatives*

*Cross-cutting competitiveness efforts*

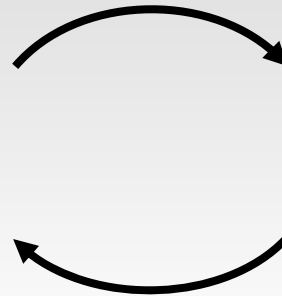
# Regional Economic Strategy

## Positioning

- Identifies, communicates, and strengthens the specific value proposition of the location

### Business Environment

- Improves the economic platform for all clusters and companies



### Cluster Portfolio

- Accelerates growth in those fields where the country has some strengths
- New clusters emerge from established clusters

# Organizing for Action

Competitiveness Councils

Competitiveness Institutes

Industry Associations

University Initiatives

Cluster Initiatives

Informal networks

Economic Development Initiatives

Joint Research Initiatives



- Many regions have created initiatives to upgrade competitiveness
- **The difference is what they do, not whether they exist**

# Improving a Location: Roles of the Private Sector

- Participate in **cluster initiatives**
- Nurture relationship to **local suppliers** and attract foreign suppliers
- Work closely with local **educational and research institutions**, to upgrade their **quality and create specialized programs addressing the cluster's needs**
- Inform government on **regulatory issues and constraints** bearing on cluster development
- Focus **corporate philanthropy** on enhancing the local business environment

# Construction Industry and Regional Competitiveness

- Your industry is an **important driver** of the regional economy
- Your industry has a **big stake** in the development of the regional economy



- Investing in your region is **good for your companies and good for the region**

# Back-Up

# Business Competitiveness Index 2007

Rank	Country	Change
51	Saudi Arabia	=
52	Sri Lanka	+20
53	Greece	-2
54	Latvia	-2
55	Mauritius	-7
56	Poland	-3
57	China	+5
58	Panama	=
59	Brazil	-3
60	Croatia	+1
61	Jamaica	-4
62	Kenya	+8
63	Morocco	+10
64	Mexico	-5
→ 65 ←	<b>Colombia</b>	<b>-5</b> ←
66	Philippines	+5
67	Guatemala	+17
68	Uruguay	-3
69	El Salvador	-6
70	Egypt	=
71	Russia	+6
72	Kazakhstan	-3
73	Romania	+2
74	Trinidad and Tobago	-7
75	Botswana	-10

Note: Constant sample of countries

# Typical Activities of Cluster Initiatives

## Value chain

- Joint purchasing
- Joint logistics
- Joint production
- Supply-chain development

## Joint R&D

- Joint R&D projects

## Bus. environment

- Regulations and policy
- Infrastructure investment

## Firm formation

- Incubator services
- Spin-off promotion
- Business services

## Joint marketing

- Joint product branding
- Joint region branding
- Joint foreign market promotion

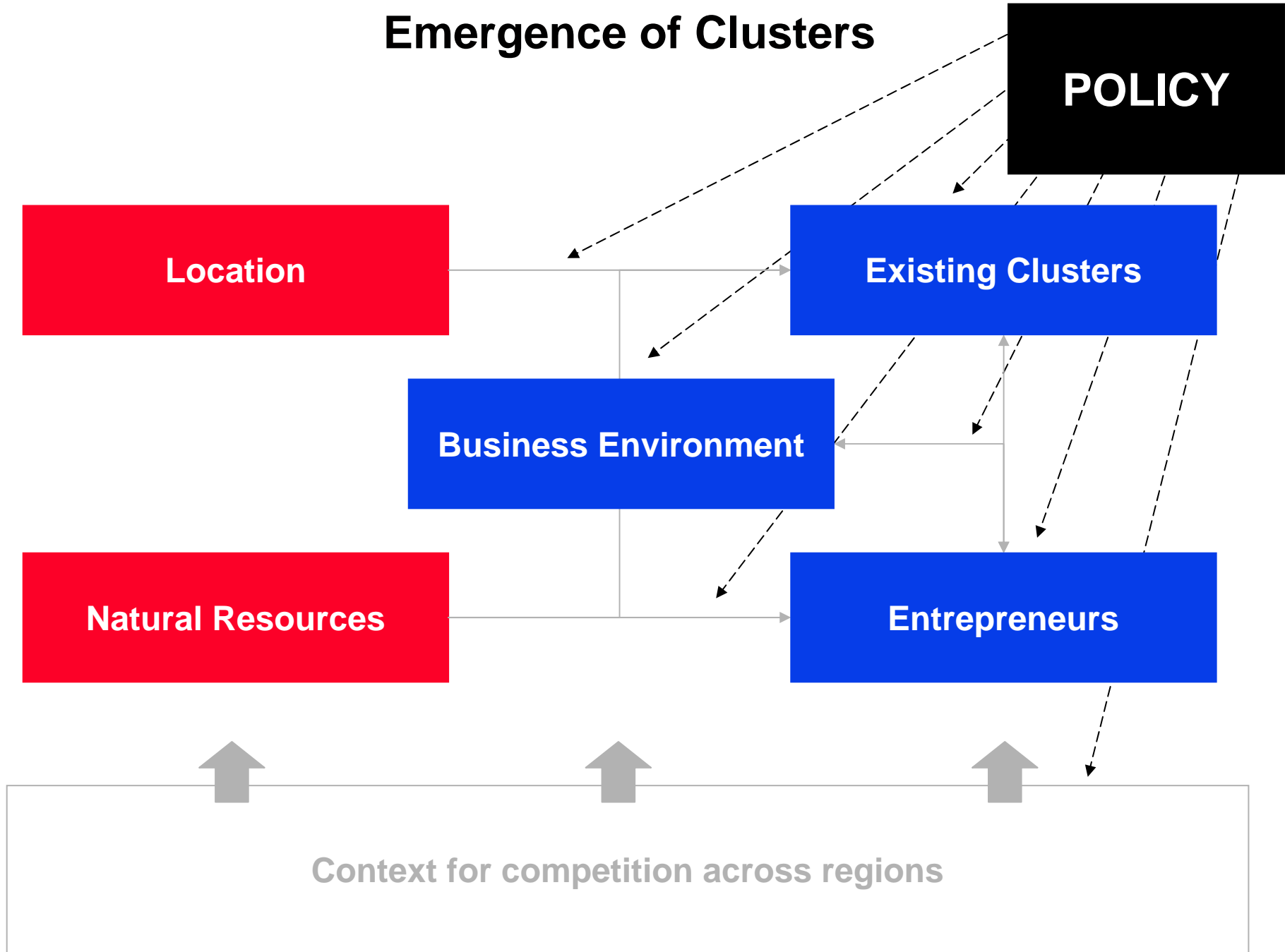
## Process/HR

- Technical training
- Management training
- Technical standards
- Education system
- Production processes

## Intelligence

- Market intelligence
- Technical trends

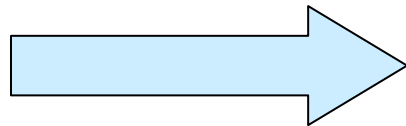
# Emergence of Clusters



# Cluster Life Cycle

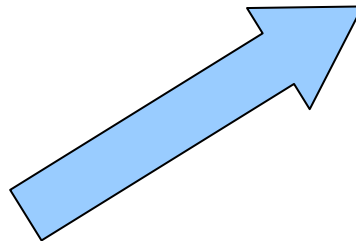
## ***Cluster growth influenced by***

- Context for competition across regions
- Business environment quality
- Entrepreneurial decisions
- Cooperation and competition in the cluster



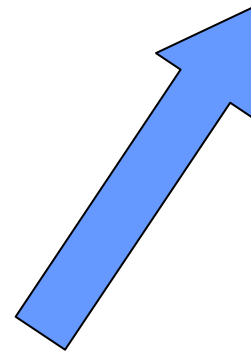
***Precedents***

**Individual activities**



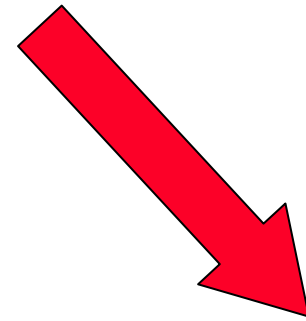
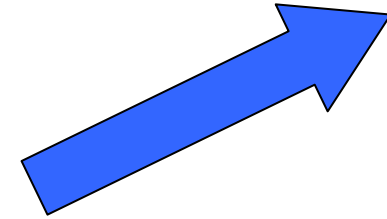
***Emergence***

**Initial cluster effects**



***Growth***

**Full cluster effects**



***Further Growth  
or  
Disappearance***

**Innovation  
or  
Obsolete technology**