

# Competitiveness for the Third Millennium: Implications for Croatia

Professor Michael E. Porter  
Harvard Business School

*CEO Agenda Forum  
Zagreb, Croatia  
May 15, 2009*

---

This presentation draws on ideas from Professor Porter's books and articles, in particular, *Competitive Strategy* (The Free Press, 1980); *Competitive Advantage* (The Free Press, 1985); "What is Strategy?" (*Harvard Business Review*, Nov/Dec 1996); "Strategy and the Internet" (*Harvard Business Review*, March 2001); and a forthcoming book. 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 Michael E. Porter. Additional information may be found at the website of the Institute for Strategy and Competitiveness, [www.isc.hbs.edu](http://www.isc.hbs.edu). Version: May 13, 2pm

---

# The Croatian Economy in 2009

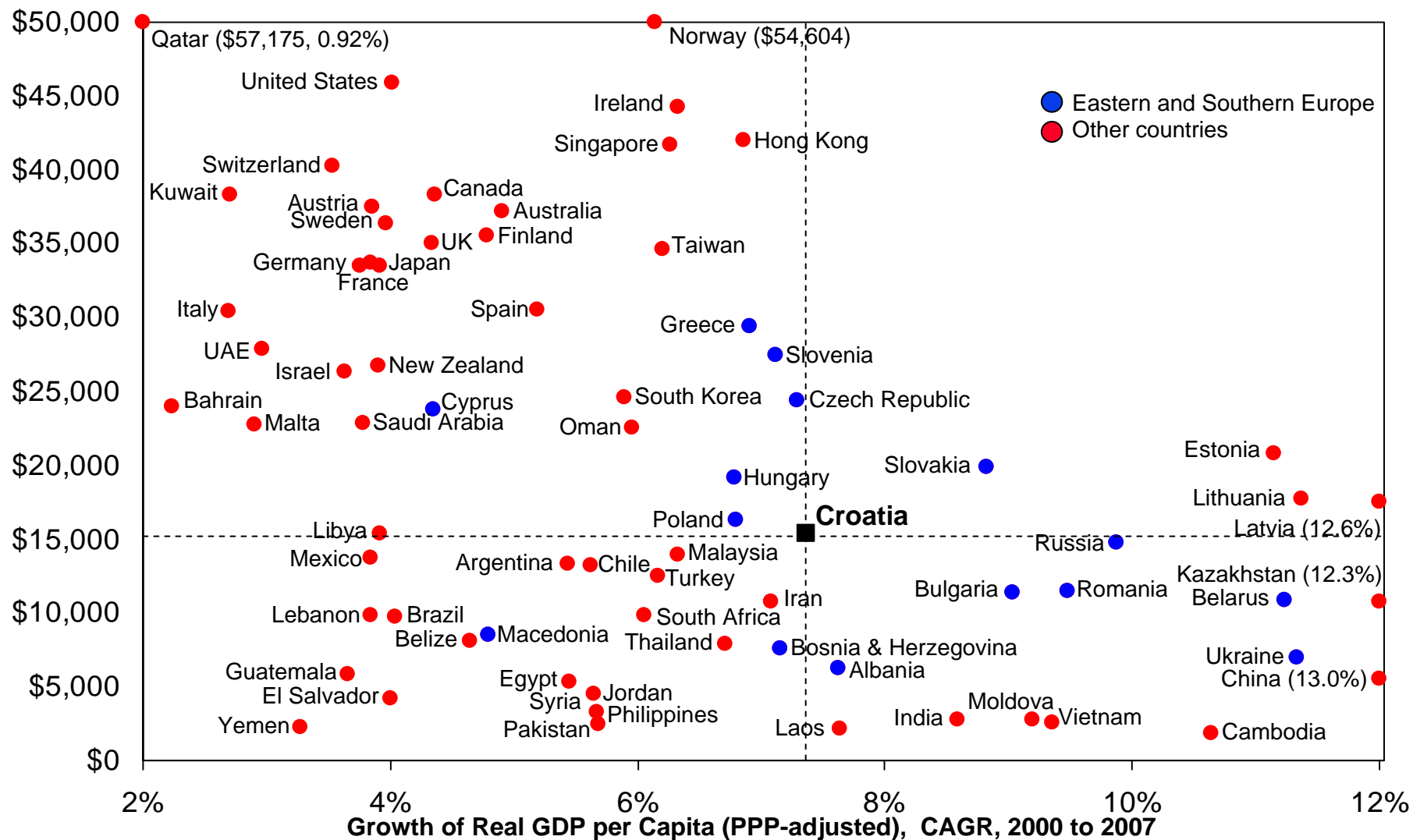
- Croatia has experienced **solid growth rates** over the last few years, taking advantage of the transition to a market economy
- The **global economic** crisis is now starting to take its toll



- Despite the recent period of growth, however, Croatia is facing **serious competitiveness challenges**
- Croatia needs to **address these issues aggressively** instead of hoping for an automatic return to growth after the crisis or that EU ascension is sufficient
- Croatia **lacks a clear strategy** and an effective implementation mechanism for improving competitiveness

# Prosperity Performance Selected Countries

PPP-adjusted GDP per Capita, 2007 (\$USD)

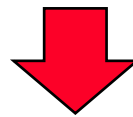


- Croatia has benefited from the end of conflict and market reforms

Note: highlighted countries are part of the East African Community (EAC). Source: EIU (2009), authors calculations

# What is Competitiveness?

- Competitiveness depends on the **productivity** with which a nation uses its human, capital, and natural resources.
  - Productivity **sets the sustainable standard of living** (wages, returns on capital, returns on natural resources)
  - It is not **what** industries a nation competes in that matters for prosperity, but **how productively** it competes in those industries
  - Productivity in a national economy arises from a **combination of domestic and foreign firms**
  - The productivity of **“local” or domestic industries** is fundamental to competitiveness, not just that of export industries

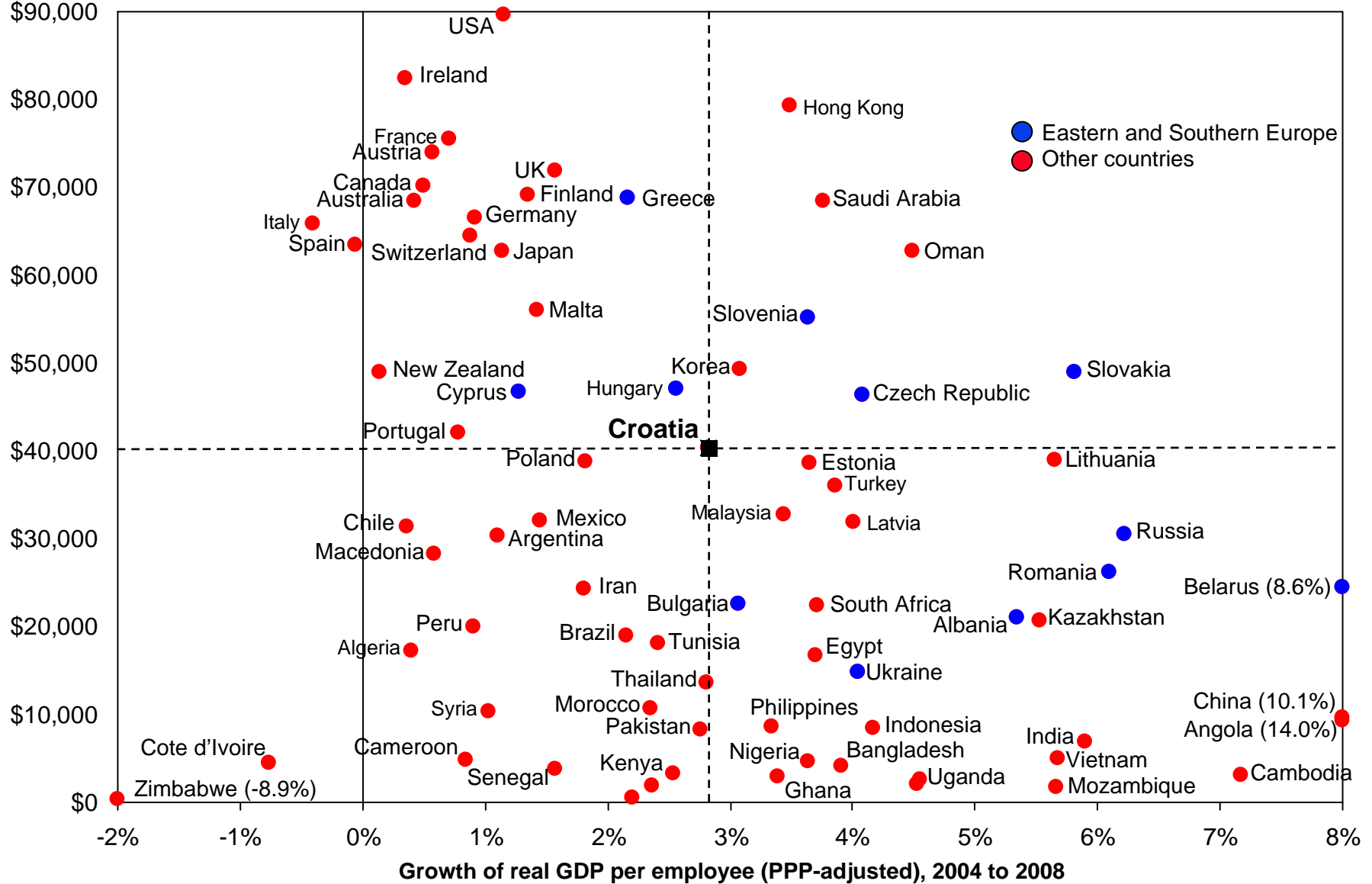


- Only competitive businesses can create wealth and jobs
- Nations compete to offer the **most productive environment for business**
- The public and private sectors play **different but interrelated roles** in creating a productive economy

# Comparative Labor Productivity

## Selected Countries

Real GDP per employee  
(PPP adjusted US\$), 2008

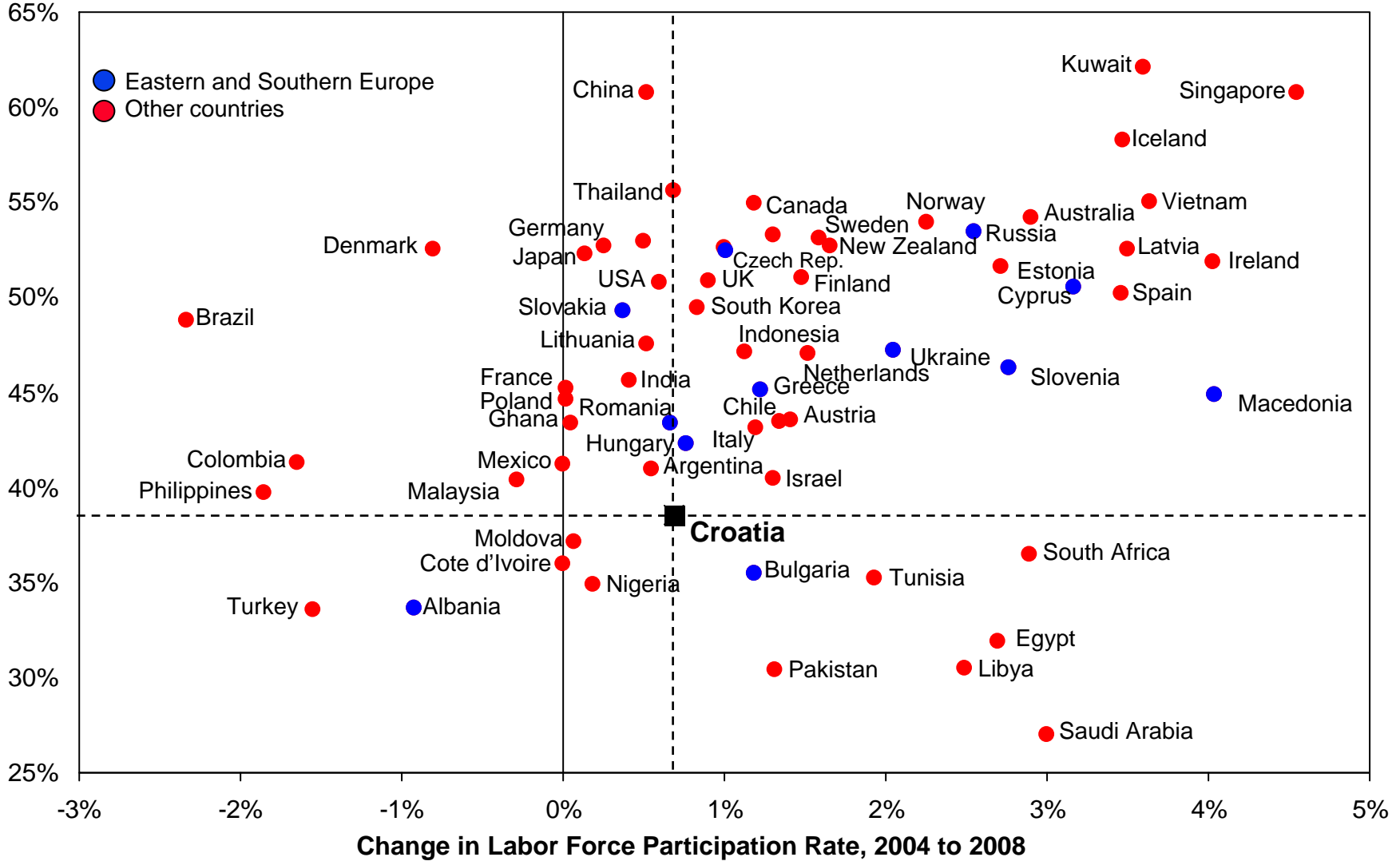


- Croatia's labor productivity is lagging, and overstated by low workforce participation

# Labor Force Utilization

## Participation Rates, Selected Countries

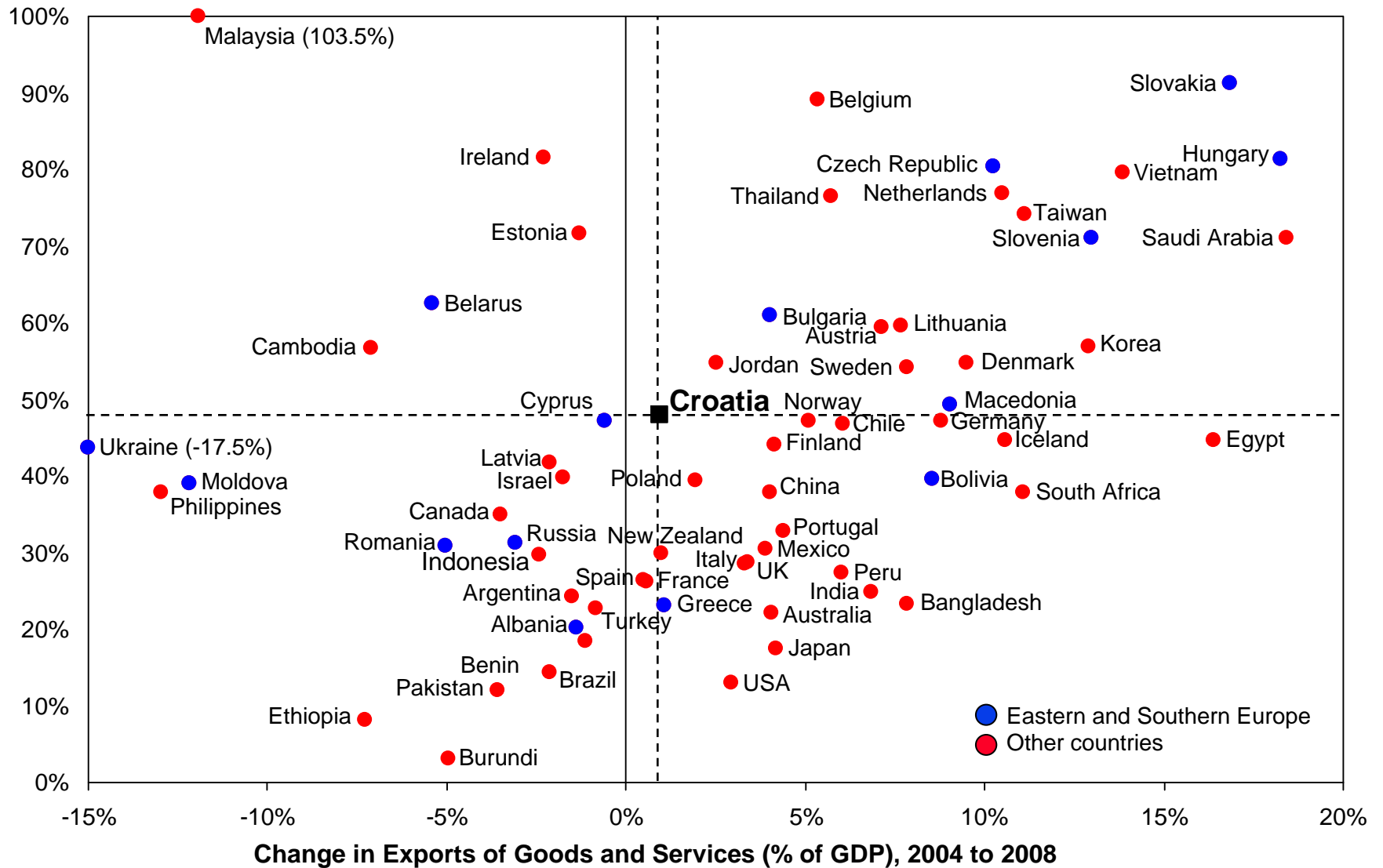
Labor Force Participation Rate, 2008



- Croatia is caught in a trap where low productivity retards job growth, but unemployment retards needed reforms

# Export Performance Selected Countries

Exports of Goods and Services (% of GDP), 2008



- Croatia's export growth is **lagging**

Source: EIU (2008), authors' analysis

20090515 – CAON Croatia.ppt

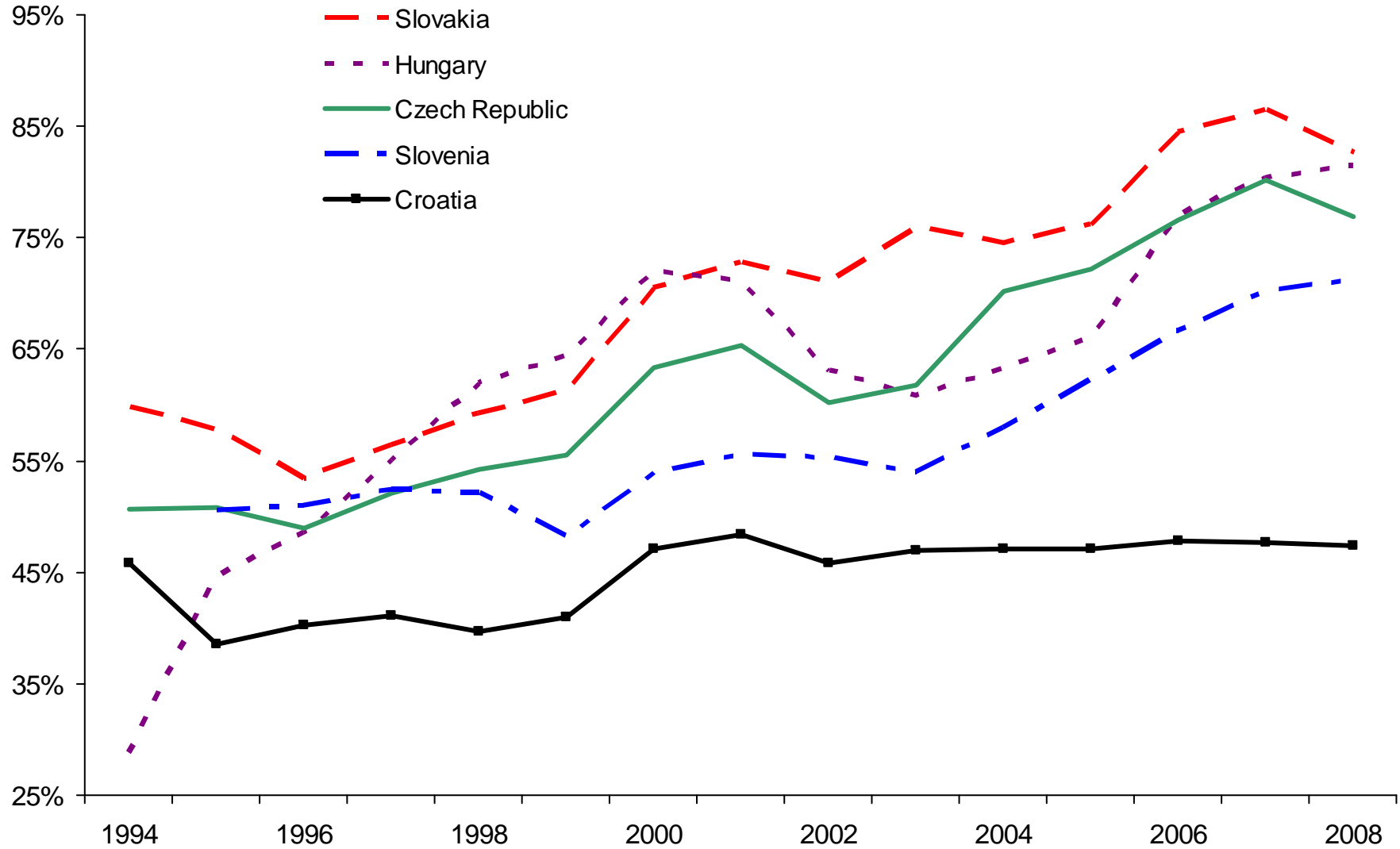
# Export Performance

## Selected Countries

Exports of Goods and Services (% of GDP)

Rank, 2008

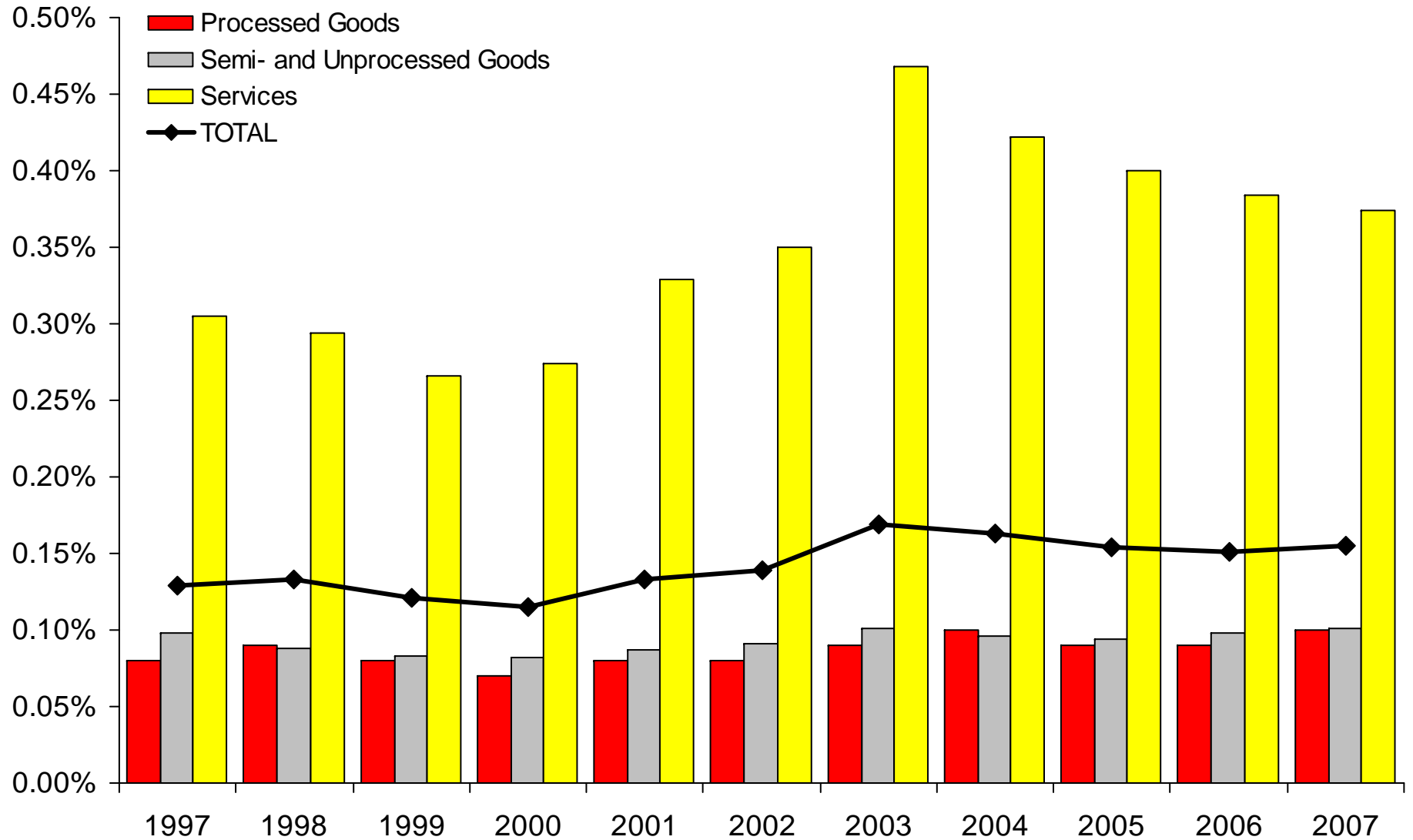
- Slovakia
- - Hungary
- Czech Republic
- - Slovenia
- Croatia





# Croatia's Exports By Type of Industry

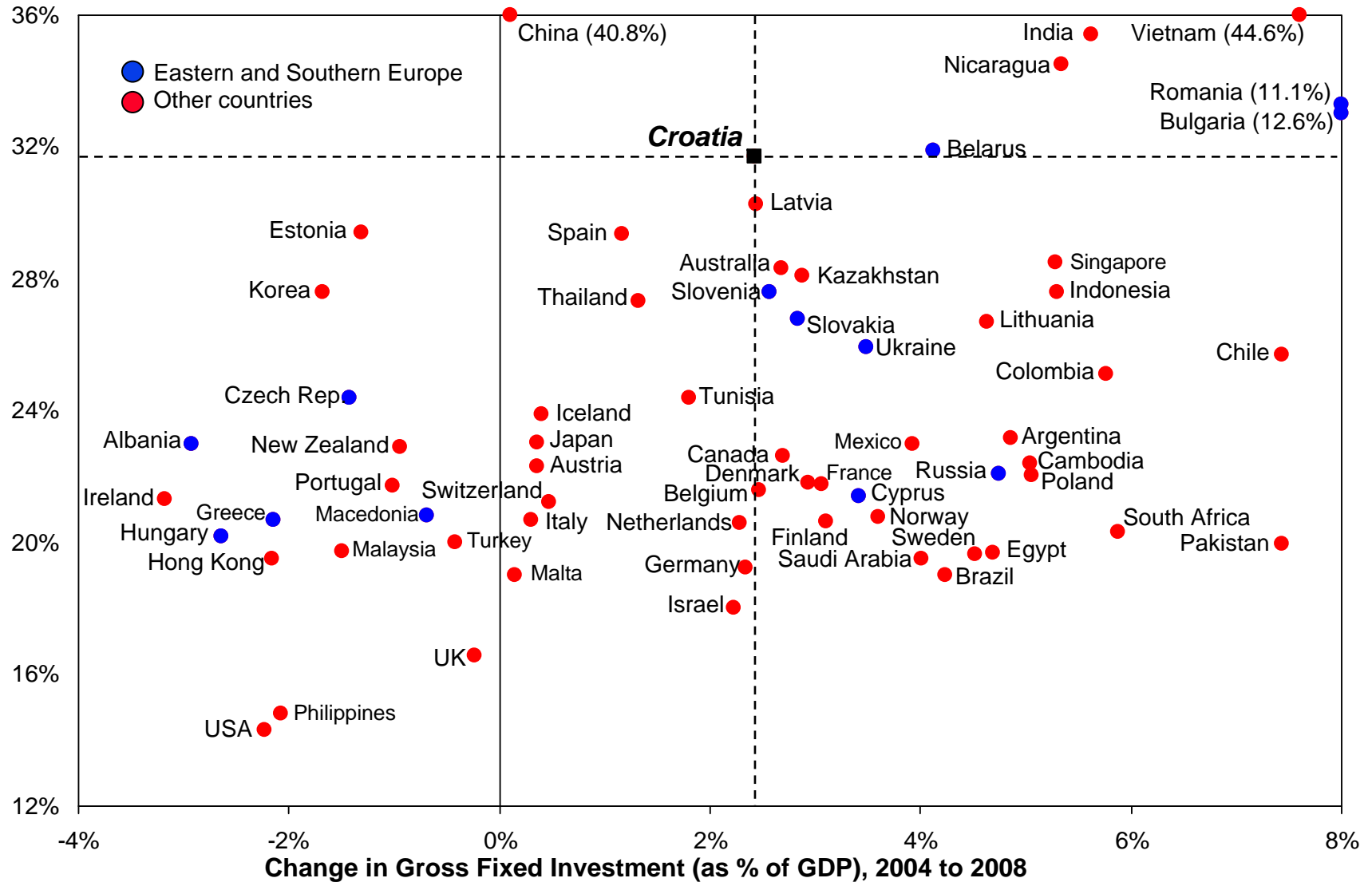
World Export Market Share (current USD)



# Domestic Fixed Investment Rates

## Selected Countries

Gross Fixed Investment  
as % of GDP, 2008



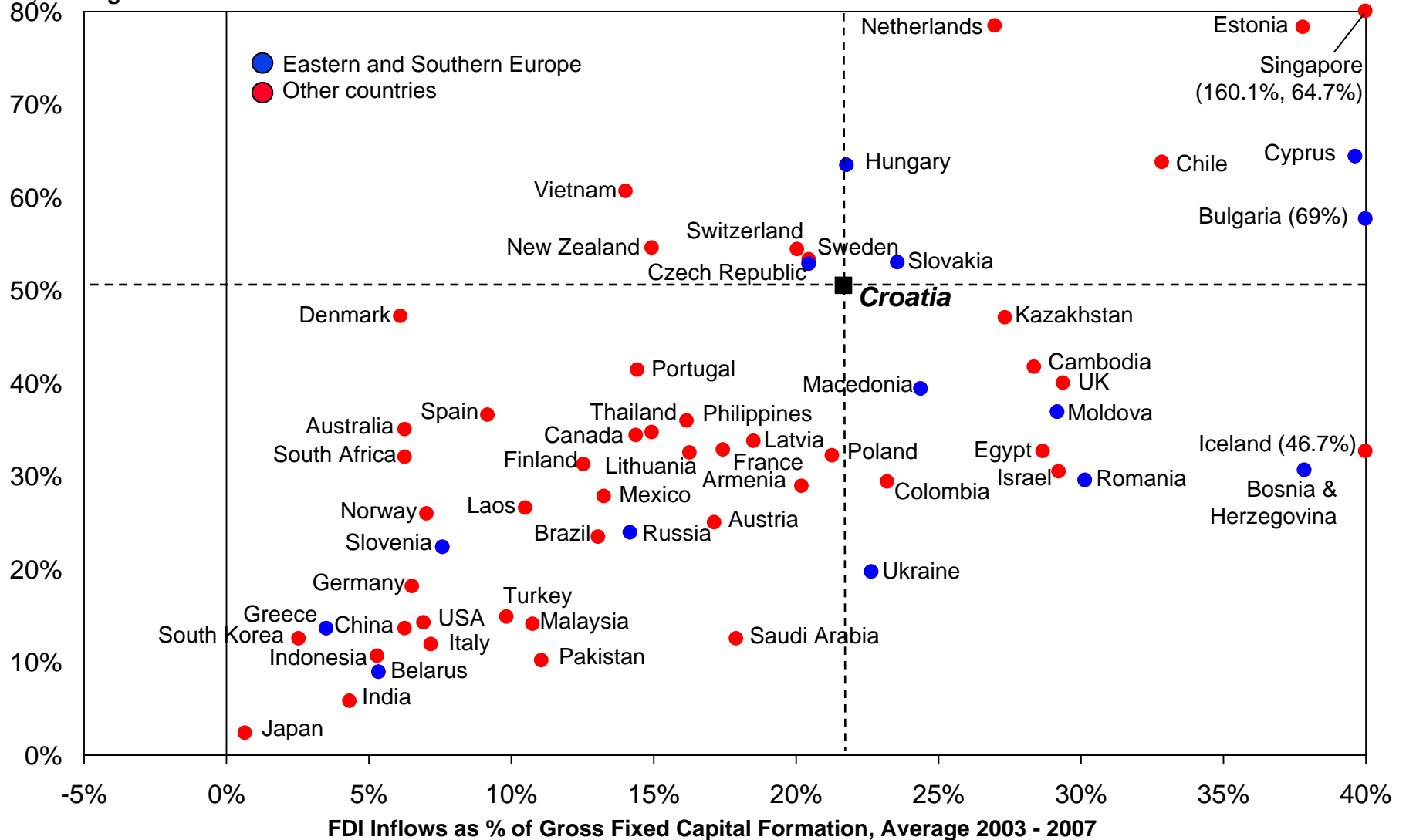
- High investment is due to catch-up investments and FDI driven by privatization

Note: Includes inbound FDI  
 Source: EIU, 2009

# Inbound Foreign Investment Performance

## Stocks and Flows, Selected Countries

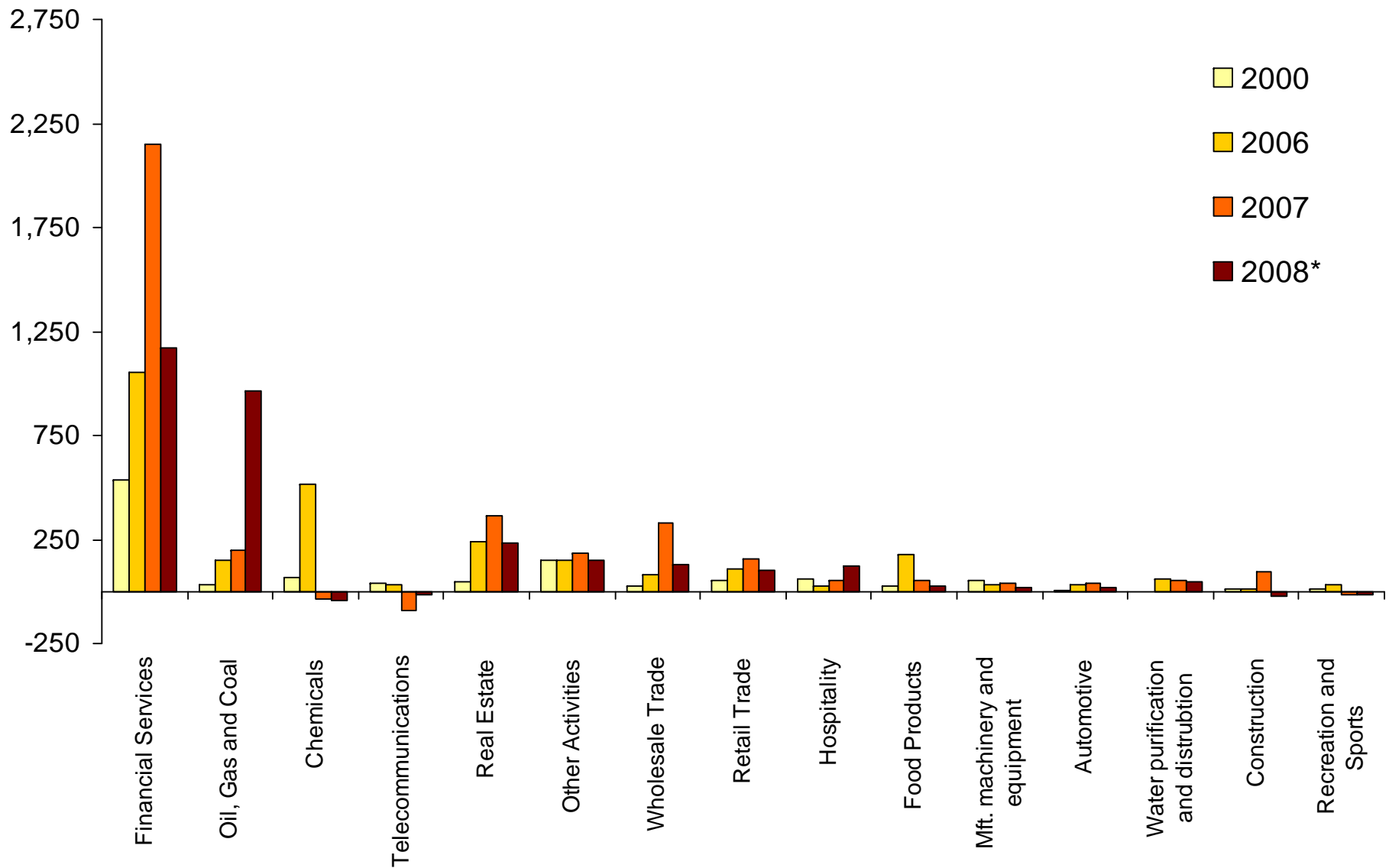
Inward FDI Stocks as % of GDP, Average 2003 - 2007



# Foreign Investment in Croatia

## Selected Activities

Average FDI by activity, millions of €



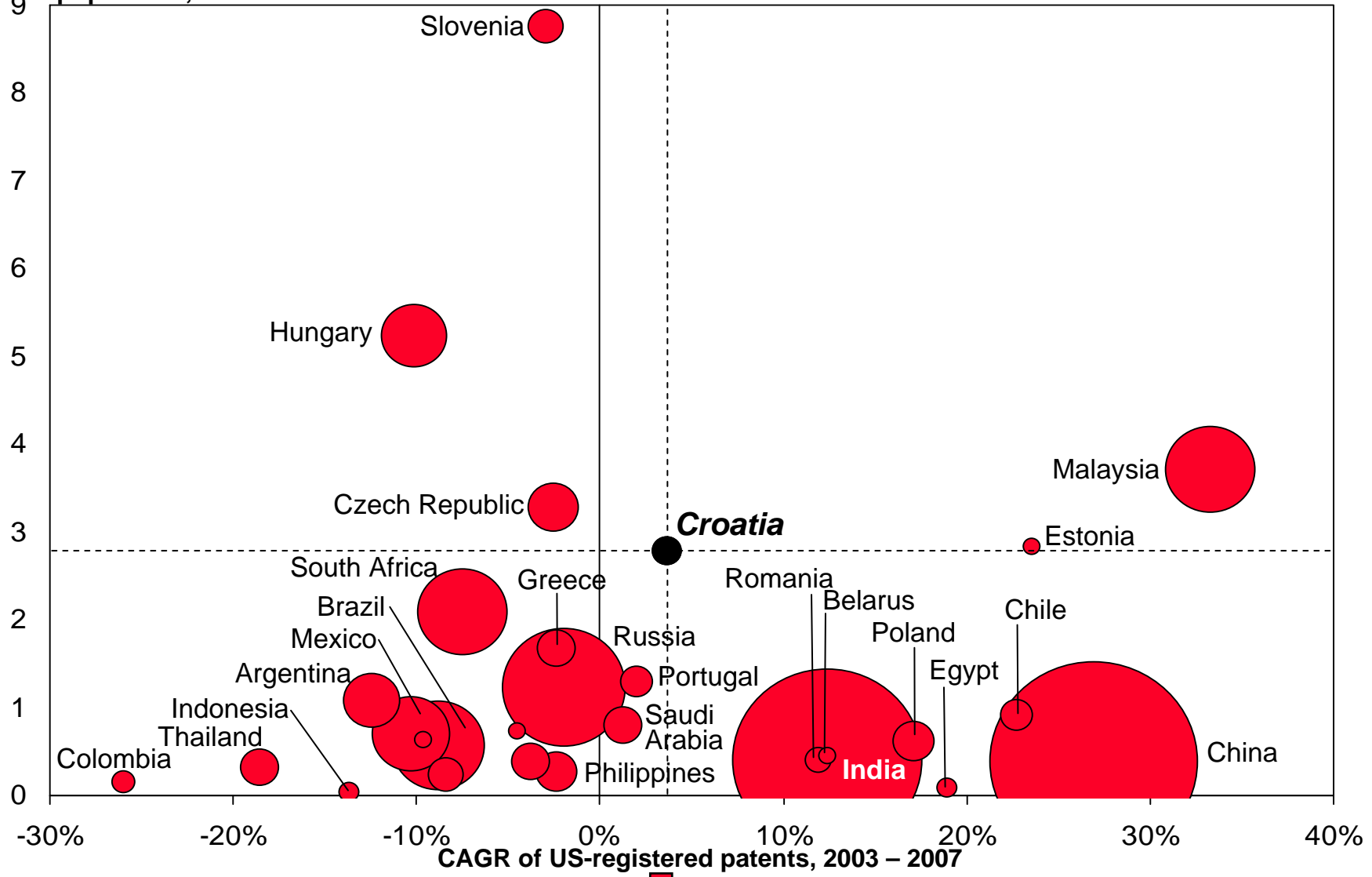
\*2008 is estimated figure.

Source: Foreign Direct Investment in Croatia (by activity), Croatian National Bank, 2009  
20090515 – CAON Croatia.ppt


# Innovative Capacity

## Innovation Output of Selected Countries

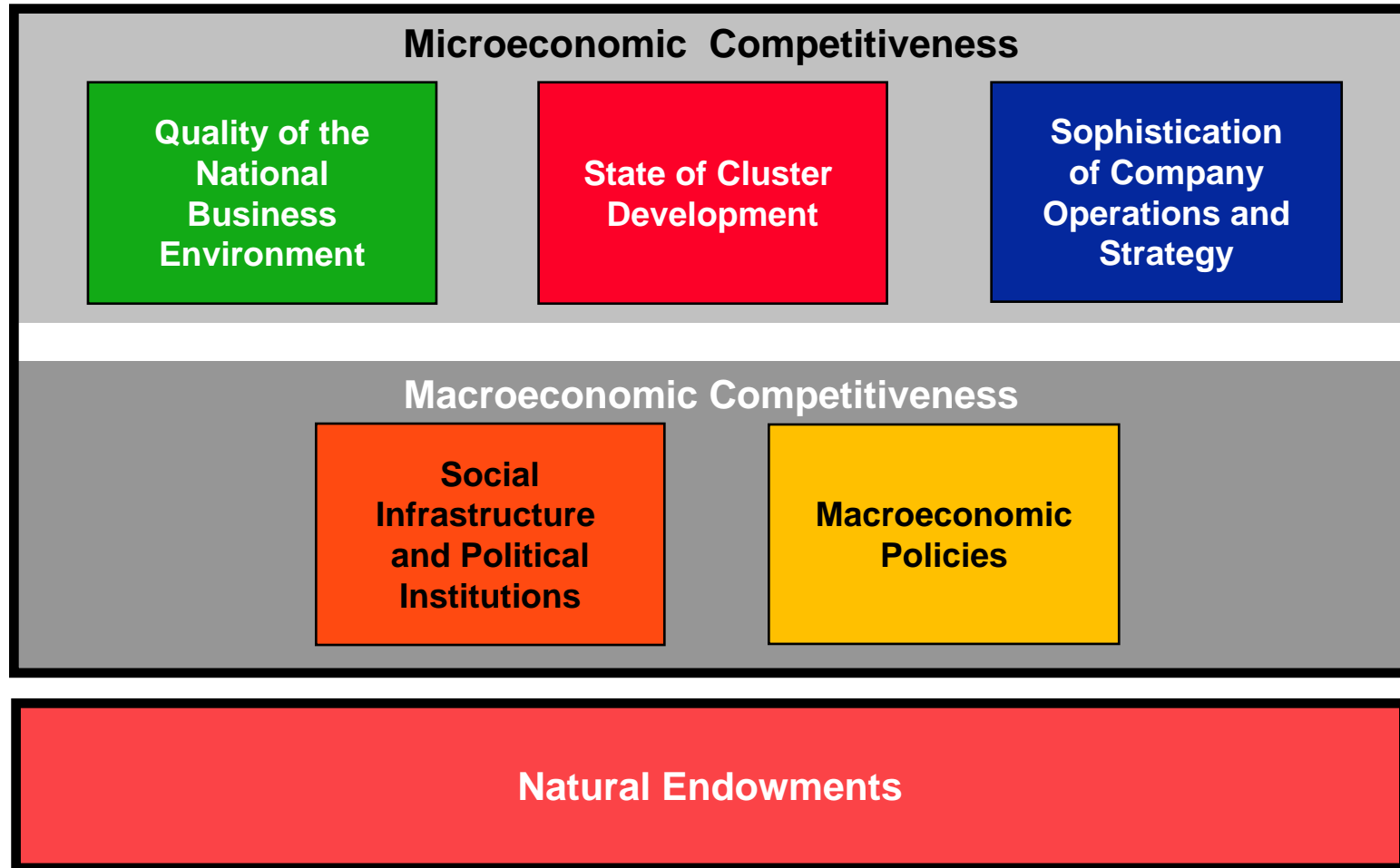
Average U.S. patents per 1 million population, 2003-2007



- Croatia has technological strengths, but these have not been mobilized in business development

50 patents = 

# Causes of Competitiveness



- Productivity ultimately depends on improving the **microeconomic capability** of the economy and the **sophistication of local competition**

# Macroeconomic Competitiveness

## Social Infrastructure and Political Institutions

- **Basic human capacity**
  - Education
  - Health
- **Safety and security**
- **Political institutions**
- **Rule of law**

## Macroeconomic Policies

- **Fiscal policy**
- **Monetary policy**

# Croatia's Competitiveness

## Progress on the Competitiveness Index

	2007	2008
<b>Estimated</b> Ranking:		
New Global Competitiveness Index	63	63
Macroeconomic Competitiveness	67	68
Social Infrastructure and Political Institutions	58	59
Macroeconomic Policy	91	84
Microeconomic Competitiveness	60	69
GDP Per Capita Rank (ppp-adjusted)	48	48

Note: Rank versus 130 countries; overall, Croatia ranks 48<sup>th</sup> in 2008 PPP adjusted GDP per capita and 63<sup>rd</sup> in Global Competitiveness  
 Source: Institute for Strategy and Competitiveness, Harvard University (2009)



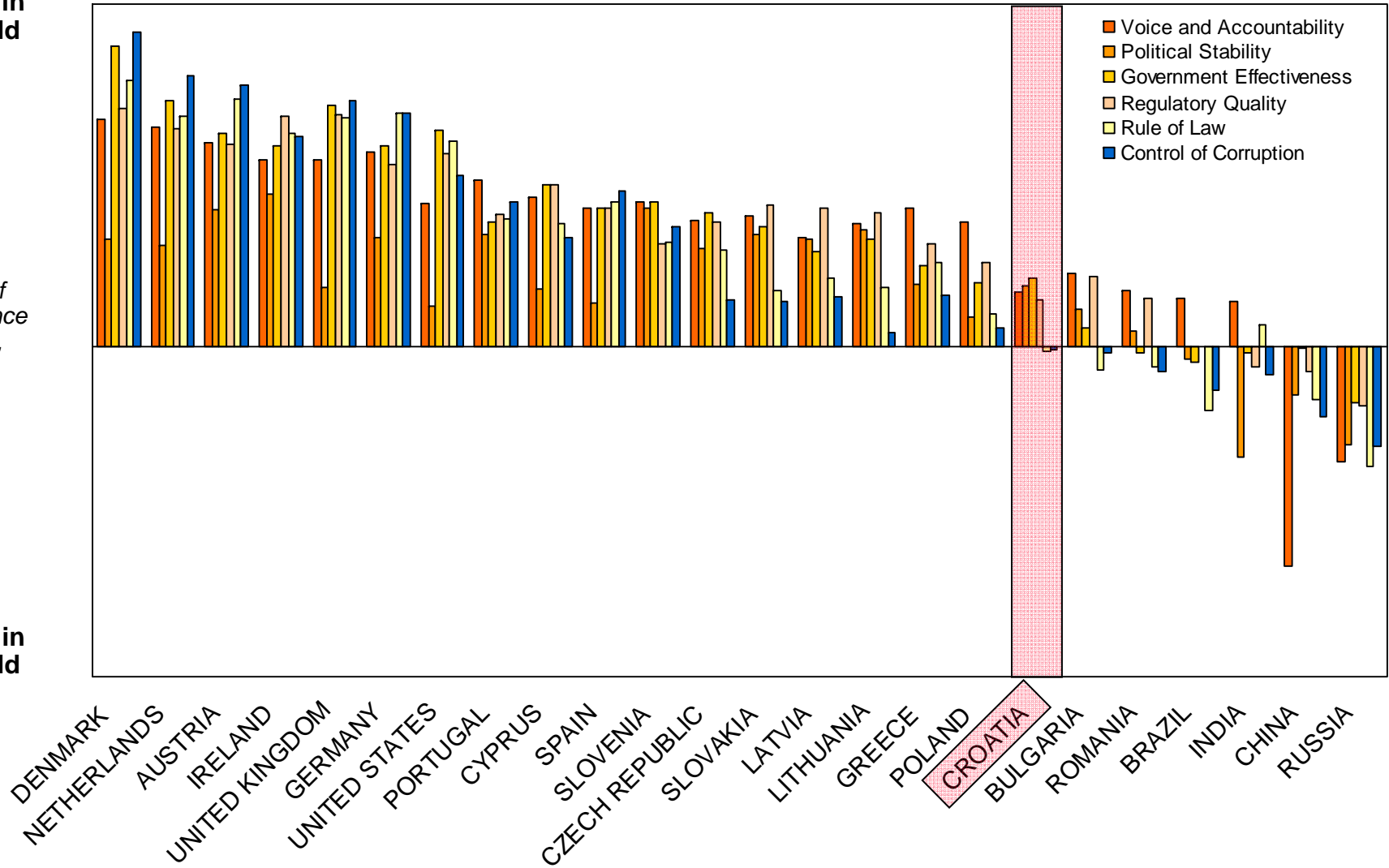
# Governance Indicators

## Selected Countries

Best country in the world

Index of Governance Quality, 2006

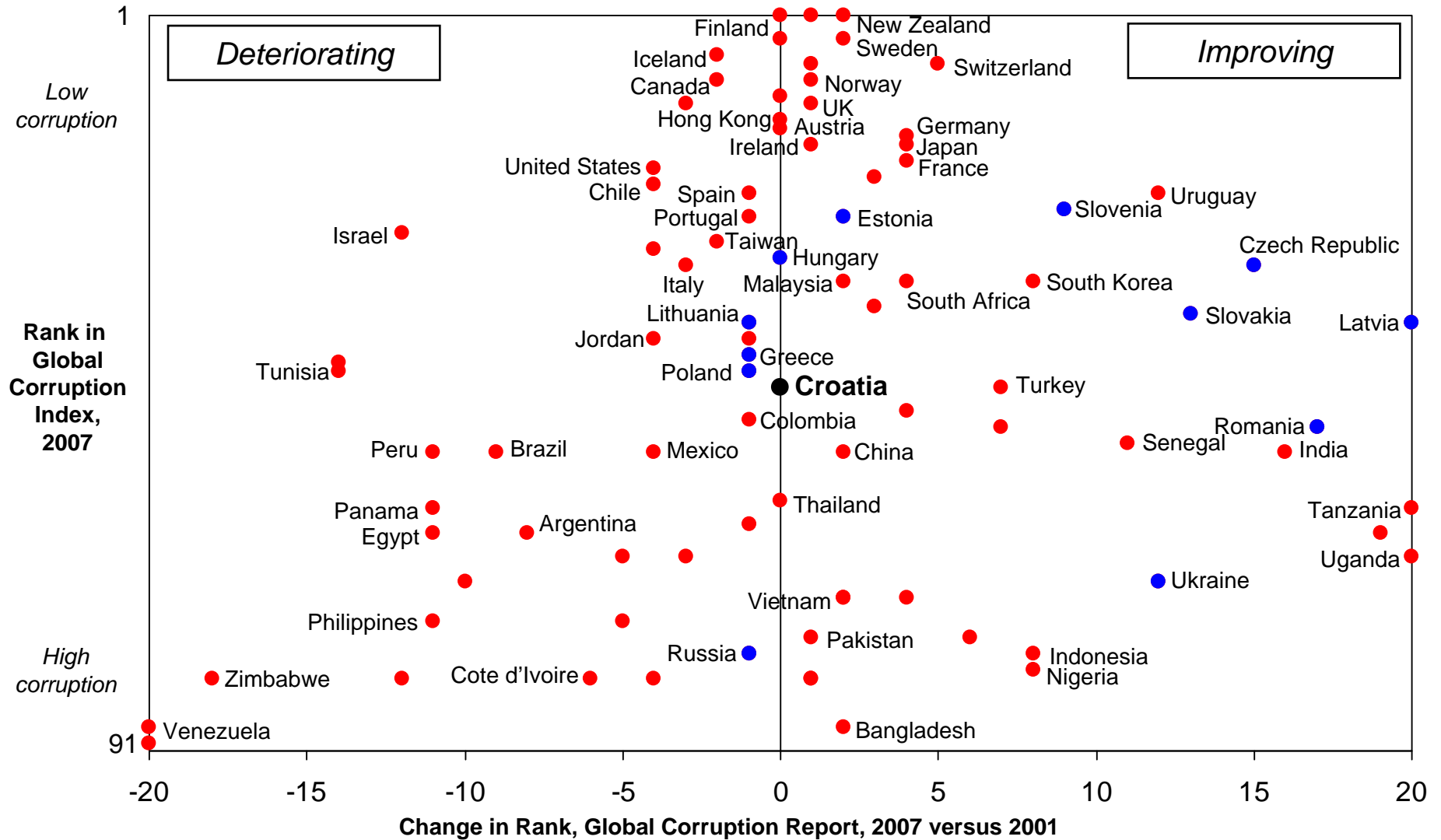
Worst country in the world



Note: Sorted left to right by decreasing average value across all indicators. The 'zero' horizontal line corresponds to the median country's average value across all indicators.

Source: World Bank (2008)  
20090515 – CAON Croatia.ppt

# Corruption Perception Index, 2007



Note: Ranks only countries available in both years (91 countries total)  
 Source: Global Corruption Report, 2007

# Macroeconomic Competitiveness

- Croatia has a **solid position** in terms of basic human development indicators, in line with many other former Communist countries
- Croatia has made some **progress on macroeconomic policy indicators**, but the current global crisis will test the sustainability of these improvements
  - Croatia has been running high current account deficits for the last decade
- Croatia remains a **regional laggard** in terms of political and legal institutional quality and there are few signs of fundamental improvements



- Croatia's government is much **too big**
- Croatia has **much work to do** to improve its macroeconomic competitiveness, especially its institutions

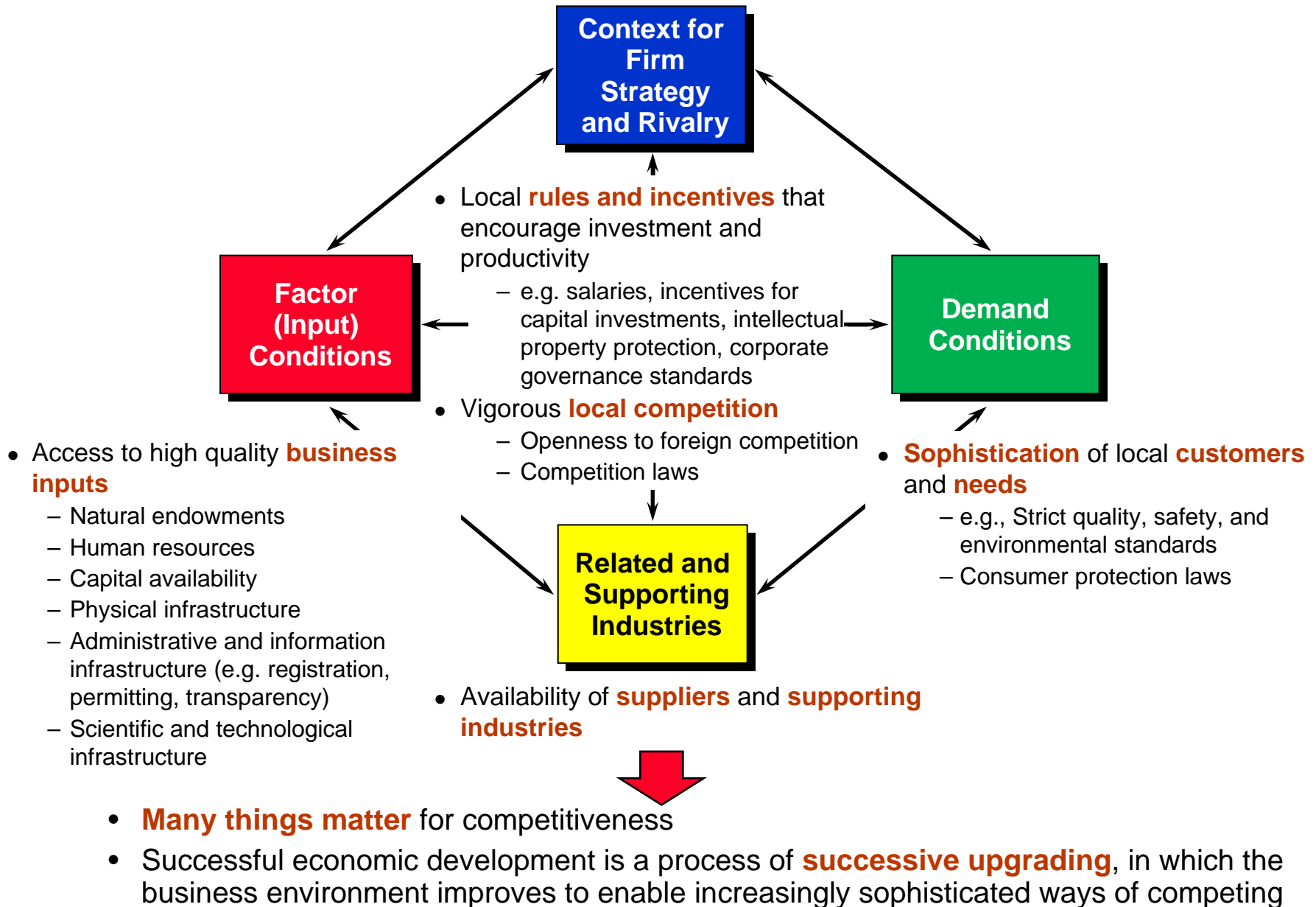
# Croatia's Position

## Microeconomic Competitiveness

	<u>2007</u>	<u>2008</u>
<b>Estimated</b> Microeconomic Competitiveness Index	60	69
National Business Environment	63	69
Company Operations and Strategy	58	64

Note: Rank versus 130 countries; overall, Croatia ranks 48<sup>th</sup> in 2008 PPP adjusted GDP per capita and 63<sup>rd</sup> in Global Competitiveness  
Source: Institute for Strategy and Competitiveness, Harvard University (2009)

# Microeconomic Competitiveness: Quality of the Business Environment



**Factor  
(Input)  
Conditions**

# Factor (Input) Conditions

## Croatia's Relative Position 2008

### Competitive Advantages Relative to GDP per Capita

Mobile telephone subscribers per 100 population	26	↑
Telephone lines per 100 population	30	
Quality of roads	30	↑
Quality of math and science education	35	↓
Internet users per 100 population	35	
Utility patents per million population	36	
Ease of starting a new business	42	↓
Personal computers per 100 population	43	
Quality of telephone infrastructure	44	↓
Quality of electricity supply	44	
Quality of railroad infrastructure	44	↑
Number of procedures required to start a business	44	↑
Quality of scientific research institutions	47	↑



Change up/down of more than 5 ranks since 2007

### Competitive Disadvantages Relative to GDP per Capita

Protection of minority shareholders' interests	101	↓
Burden of government regulation	97	↑
Time required to start a business	91	
Venture capital availability	87	↓
Quality of port infrastructure	84	↑
Quality of air transport infrastructure	83	↓
Ease of access to loans	81	↓
Brain drain	80	↓
Quality of management schools	76	
Regulation of securities exchanges	74	
Financial market sophistication	71	↓
Burden of customs procedures	63	↓
Quality of the educational system	62	
Demand conditions	61	
Soundness of banks	60	↓
University-industry research collaboration	51	↓
Tertiary enrollment	49	

Note: Rank versus 130 countries; overall, Croatia ranks 48<sup>th</sup> in 2008 PPP adjusted GDP per capita and 63<sup>rd</sup> in Global Competitiveness

Source: Institute for Strategy and Competitiveness, Harvard University (2009)

# Context for Strategy and Rivalry

## Croatia's Relative Position 2008

### Competitive Advantages Relative to GDP per Capita

Low Tariff rates 34



Change up/down of more  
than 5 ranks since 2007

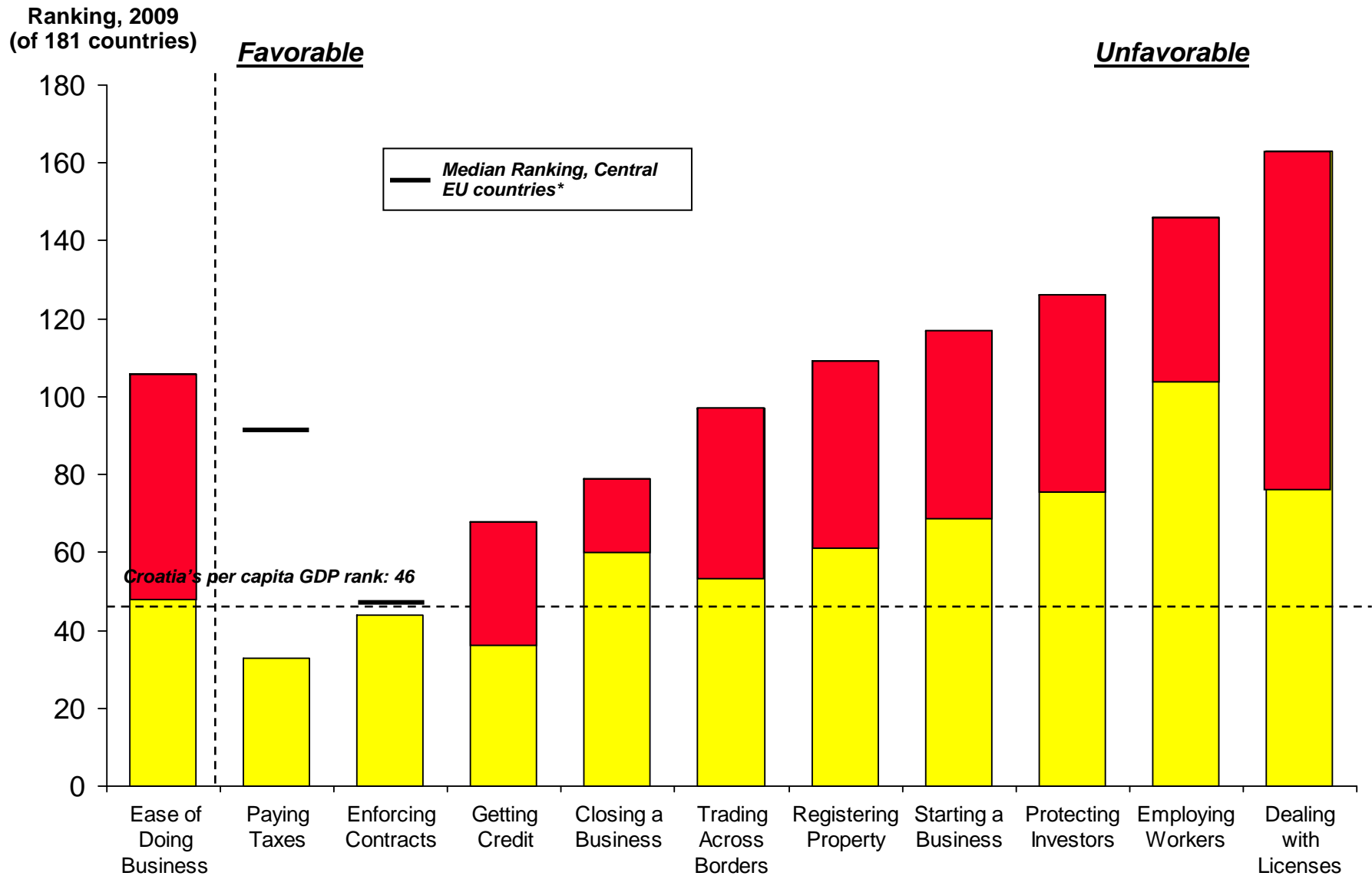
### Competitive Disadvantages Relative to GDP per Capita

Business impact of rules on FDI	114	↓
Cooperation in labor-employer relations	110	
Low market disruption from state-owned enterprises	110	
Impact of taxation on incentives to work and invest	103	↓
Rigidity of employment	102	
Effectiveness of antitrust policy	98	↓
Extent of market dominance by business groups	98	↓
Efficacy of corporate boards	98	
Strength of investor protection	95	
Pay and productivity	88	↓
Distortive effect of taxes and subsidies on competition	80	↑
Restrictions on capital flows	76	
Strength of auditing and reporting standards	76	↓
Prevalence of trade barriers	73	↓
Intensity of local competition	71	
Intellectual property protection	68	↓
Regulatory quality	54	



- On some indicators, Croatia is ranked at the level of some African countries

# Doing Business Indicators



\* Central European EU countries include: Austria, Bulgaria, the Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia  
Source: World Bank Report, Doing Business (2009)



# **Demand Conditions**

## **Croatia's Relative Position 2008**

### **Competitive Advantages Relative to GDP per Capita**

### **Competitive Disadvantages Relative to GDP per Capita**

Buyer sophistication	92	↓
Government success in ICT promotion	76	
Government procurement of advanced technology products	68	↑
Presence of demanding regulatory standards	67	↓
Stringency of environmental regulations	54	↓



Change up/down of more than 5 ranks since 2007

Note: Rank versus 130 countries; overall, Croatia ranks 48<sup>th</sup> in 2008 PPP adjusted GDP per capita and 63<sup>rd</sup> in Global Competitiveness

Source: Institute for Strategy and Competitiveness, Harvard University (2009)

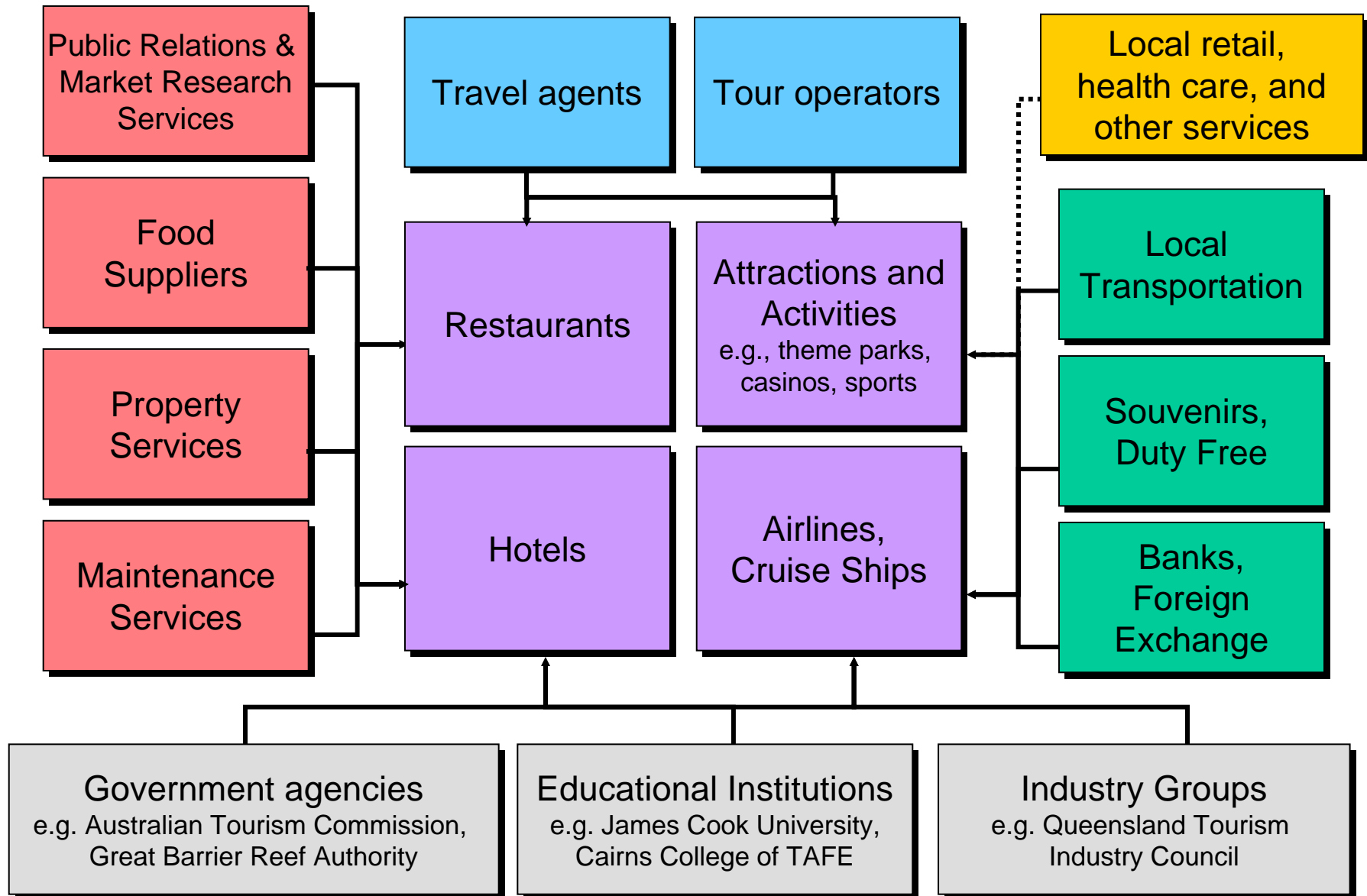
# Croatia's Business Environment Quality

## Overview

- Basic factor conditions are relatively strong but weaknesses exist in more advanced dimensions
  - Relative strength in road transportation and communications infrastructure as well as fundamental innovative capacity
  - Relative strength in primary and secondary education
  - Relative weakness in financial market sophistication
  - Relative weakness in port and airport infrastructure
- Business rules and regulations remain cumbersome and distortive
  - Problematic labor relations
  - Local market still dominated by entrenched domestic business groups
  - Rules and regulations for foreign direct investors are cumbersome

# Competitiveness and Cluster Development

## Tourism Cluster in Cairns, Australia

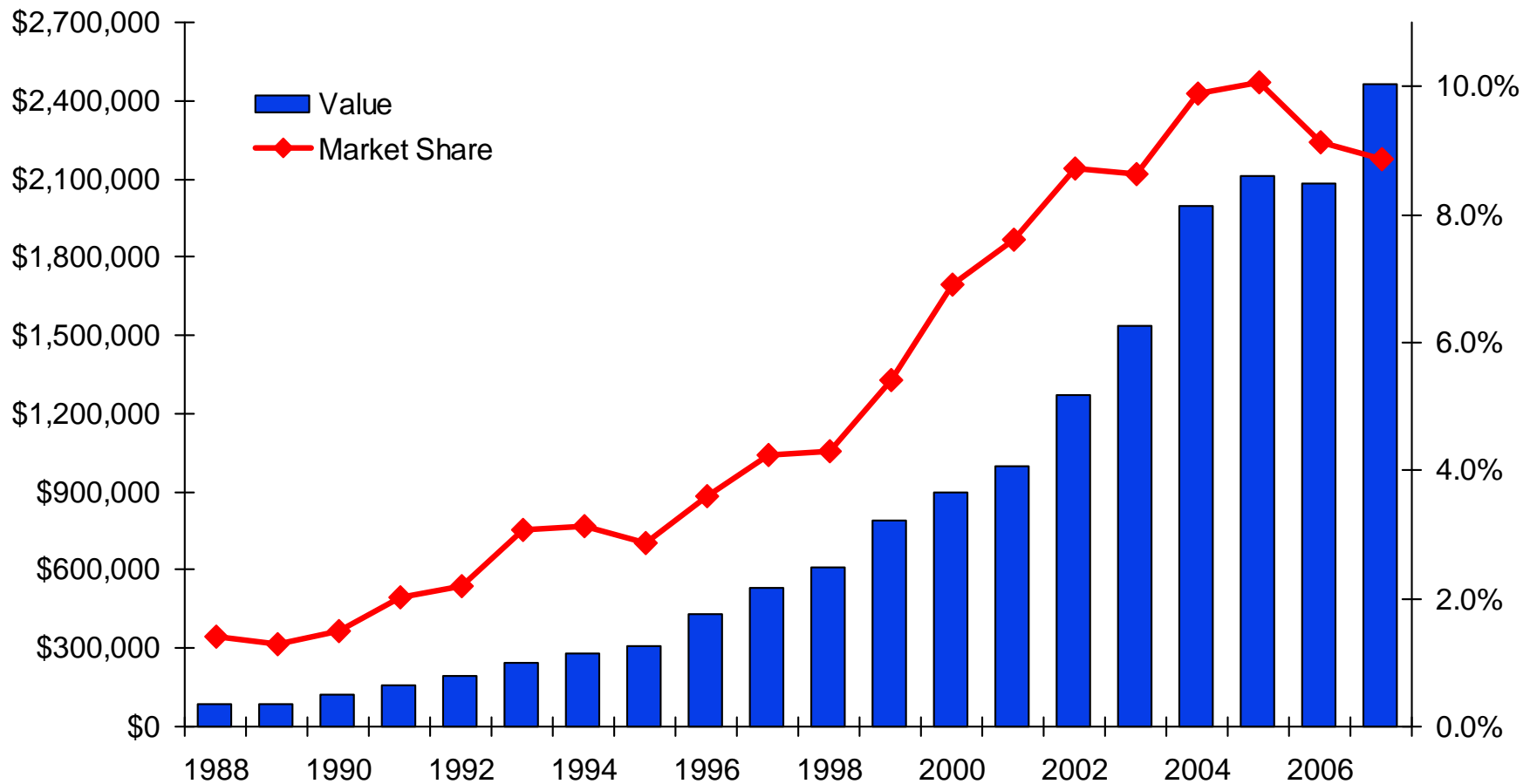


# The Australian Wine Cluster

## Trade Performance

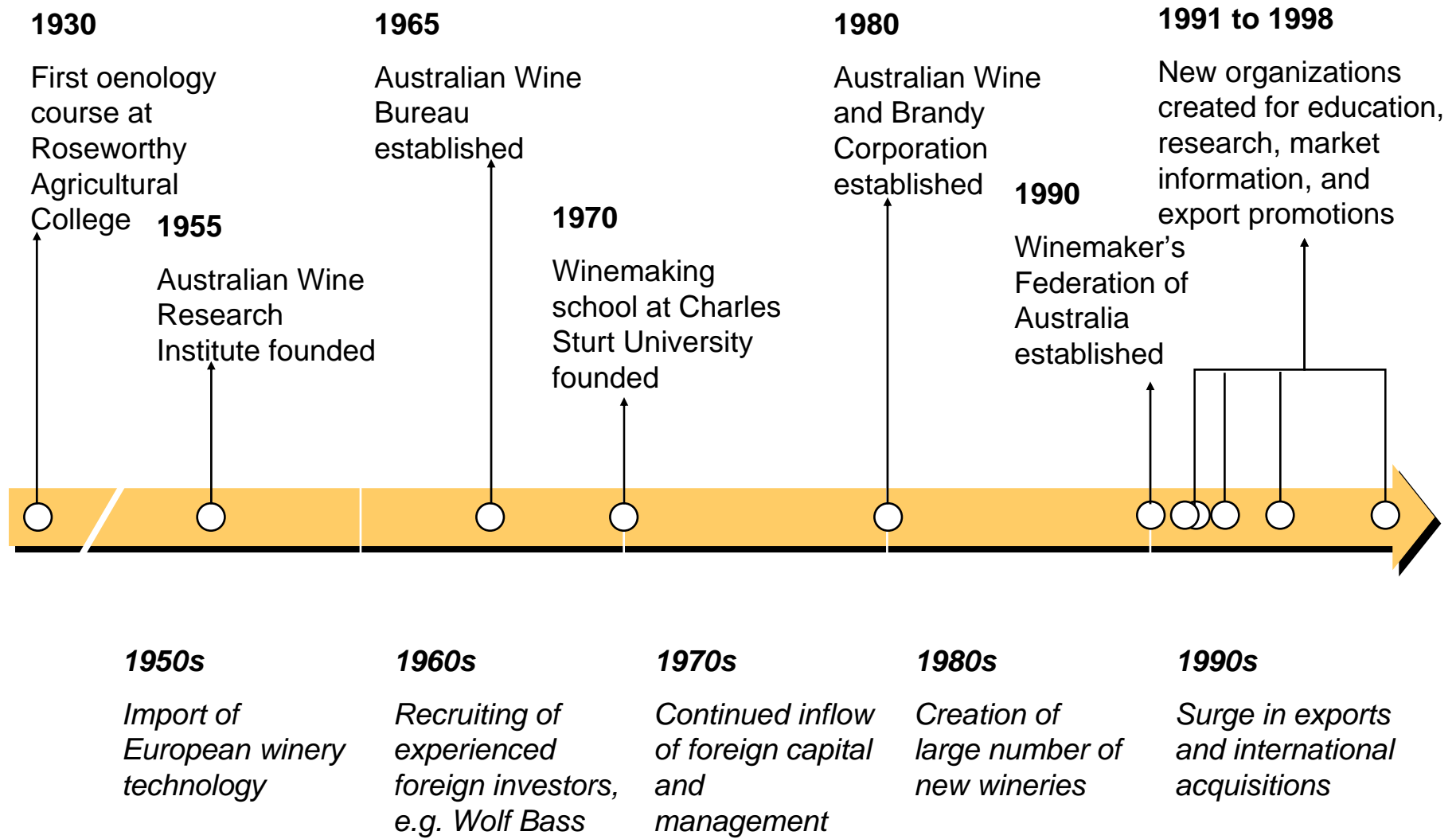
Australian Wine Exports in thousand US \$

Australian Wine World Export Market Share



Source: Prof. Michael E. Porter, International Cluster Competitiveness Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director. Underlying data drawn from the UN Commodity Trade Statistics Database.

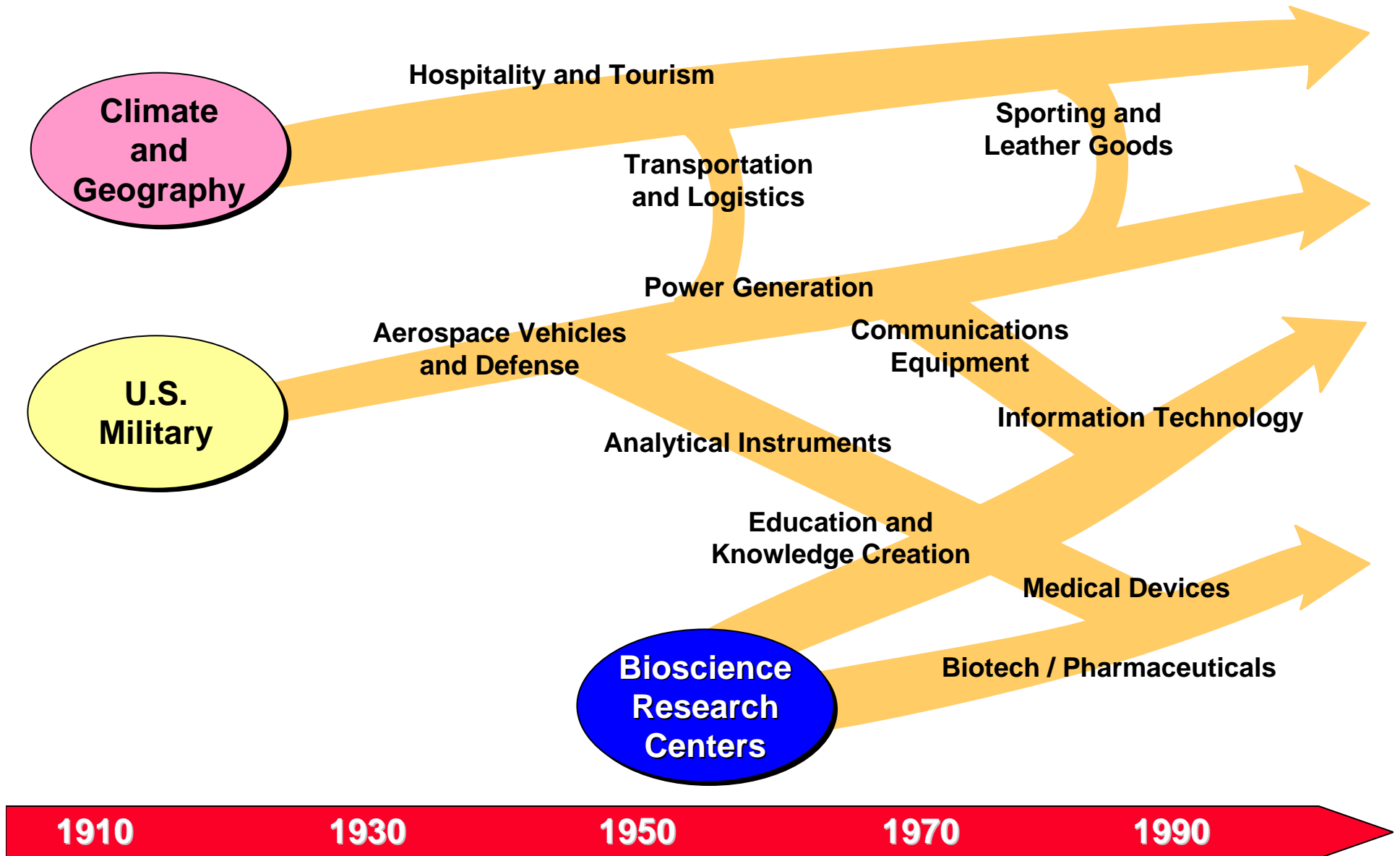
# The Australian Wine Cluster History



Source: Michael E. Porter and Örjan Sölvell, The Australian Wine Cluster – Supplement, Harvard Business School Case Study, 2002

# The Evolution of Regional Economies

## San Diego



# Related and Supporting Industries

## Croatia's Relative Position 2008

### Competitive Advantages Relative to GDP per Capita



Change up/down of more than 5 ranks since 2007

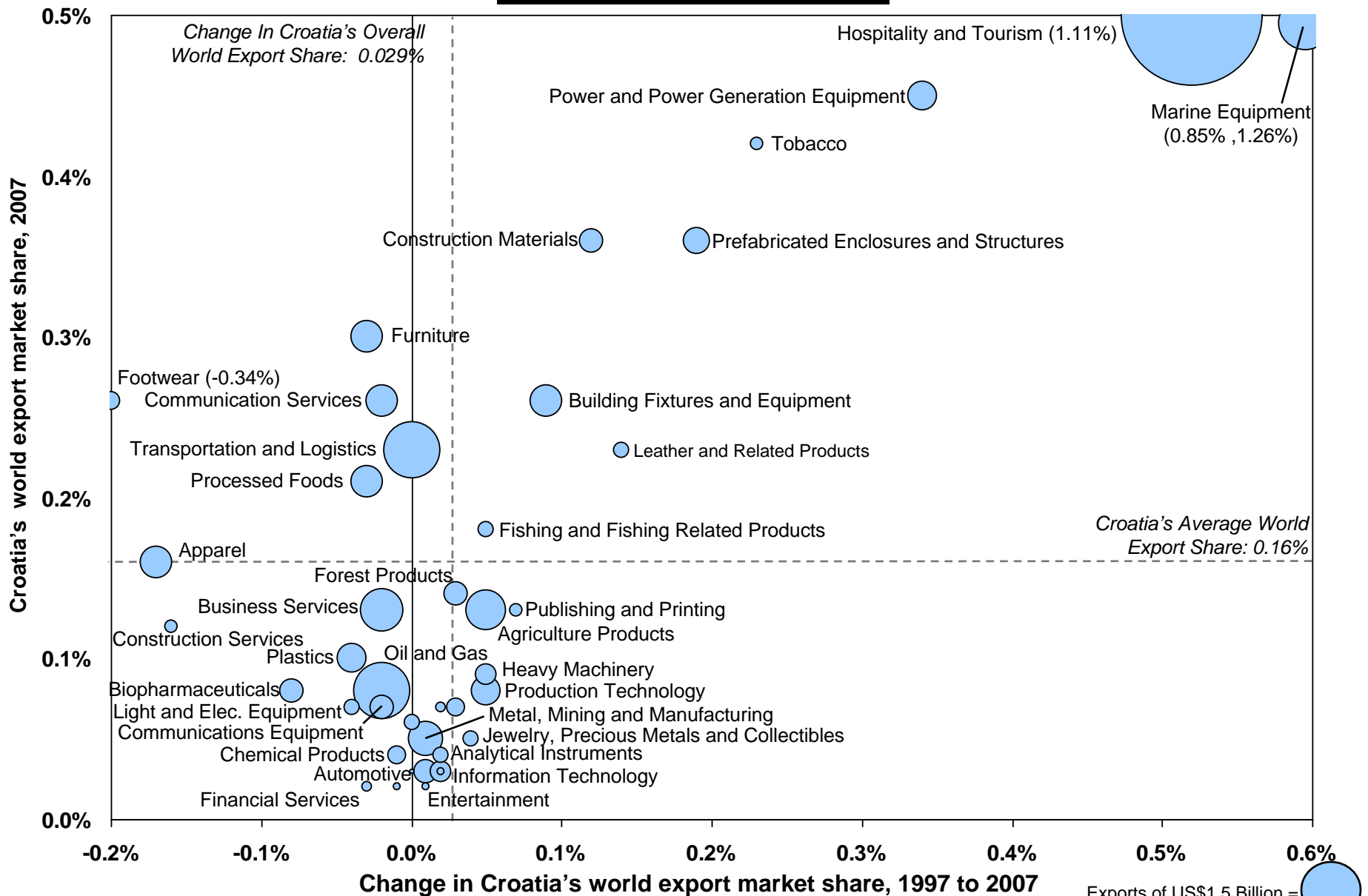
### Competitive Disadvantages Relative to GDP per Capita

State of cluster development	105	
Extent of collaboration in clusters	98	
Local supplier quantity	88	
Supporting and related industries and clusters	77	
Local supplier quality	72	
Local availability of process machinery	61	

Note: Rank versus 130 countries; overall, Croatia ranks 48<sup>th</sup> in 2008 PPP adjusted GDP per capita and 63<sup>rd</sup> in Global Competitiveness  
Source: Institute for Strategy and Competitiveness, Harvard University (2009)

# National Cluster Export Portfolio

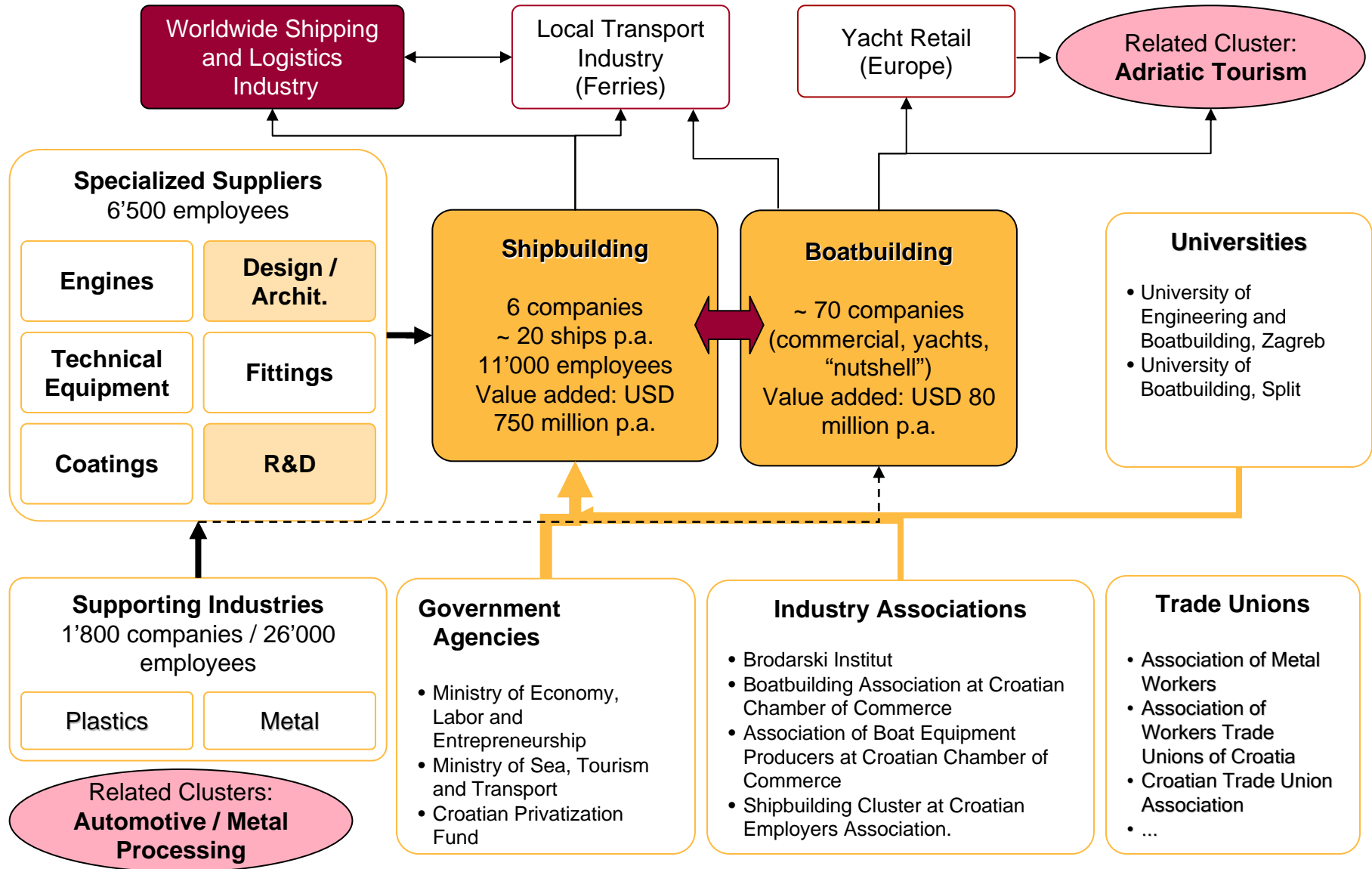
## Croatia, 1997 to 2007



Source: Prof. Michael E. Porter, International Cluster Competitiveness Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director. Underlying data drawn from the UN Commodity Trade Statistics Database and the IMF BOP statistics.  
20090515 – CAON Croatia.ppt

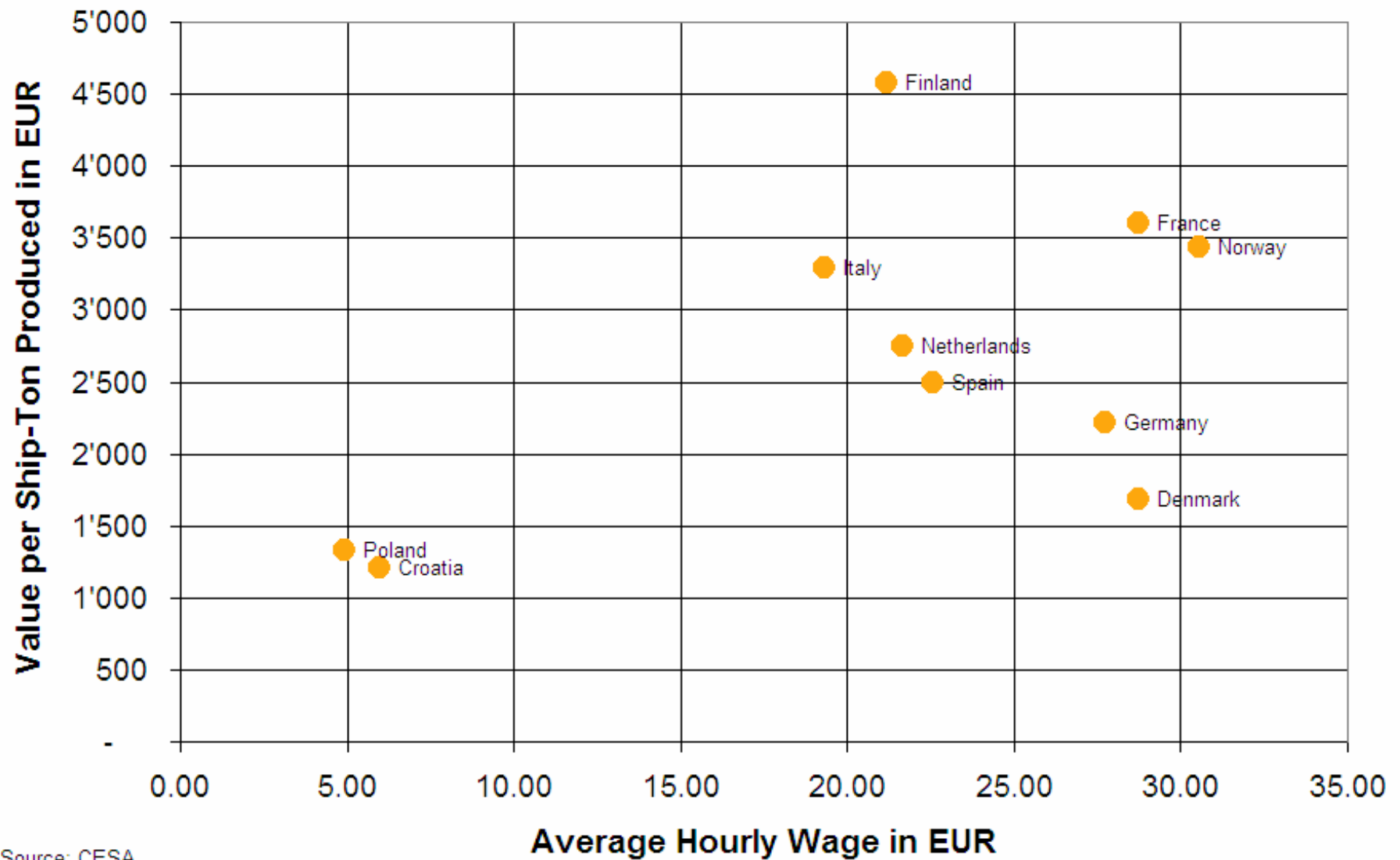


# Croatian Maritime Cluster




# Shipbuilding Cluster Productivity

## Select European Countries

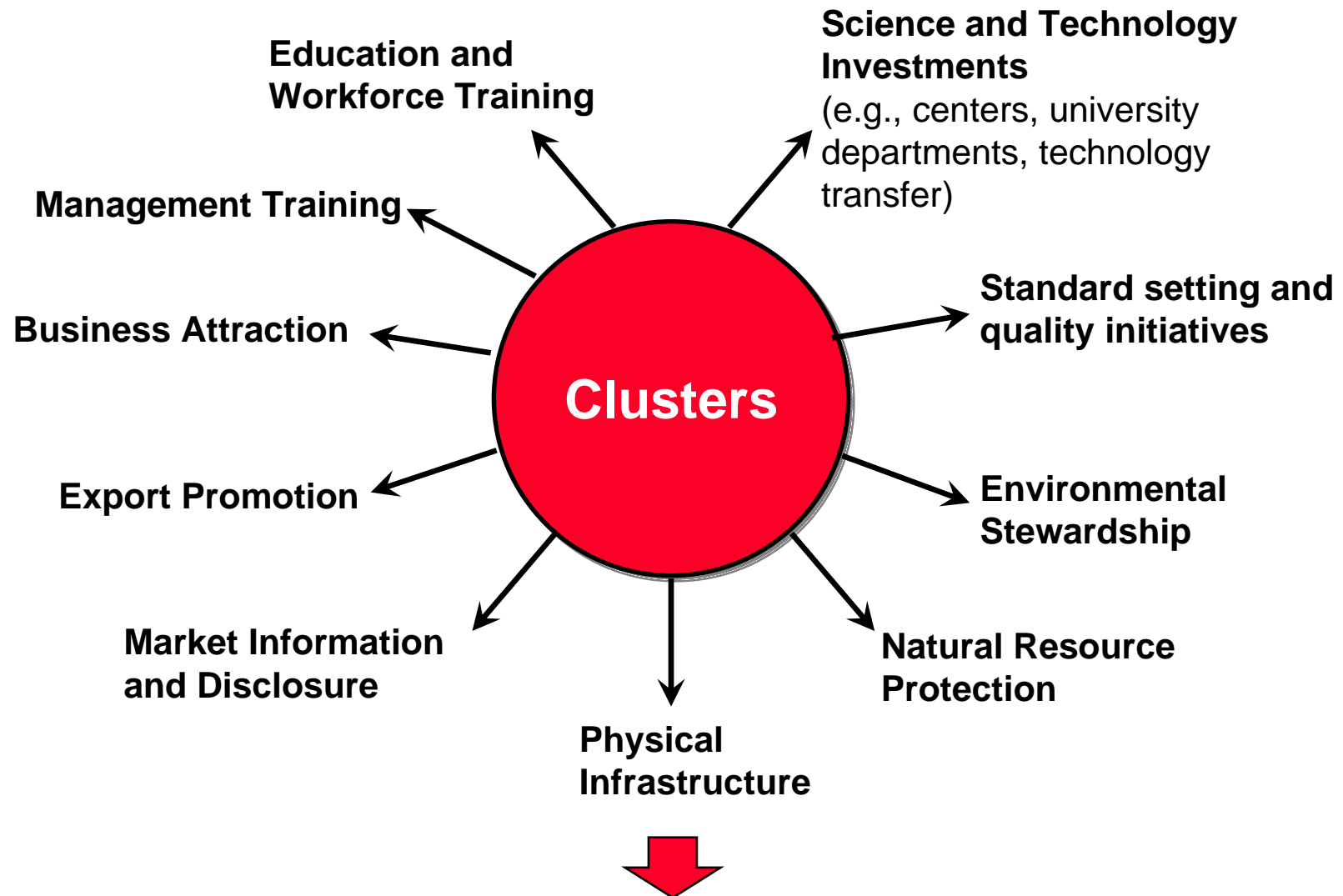


Source: CESA

# Croatian Clusters

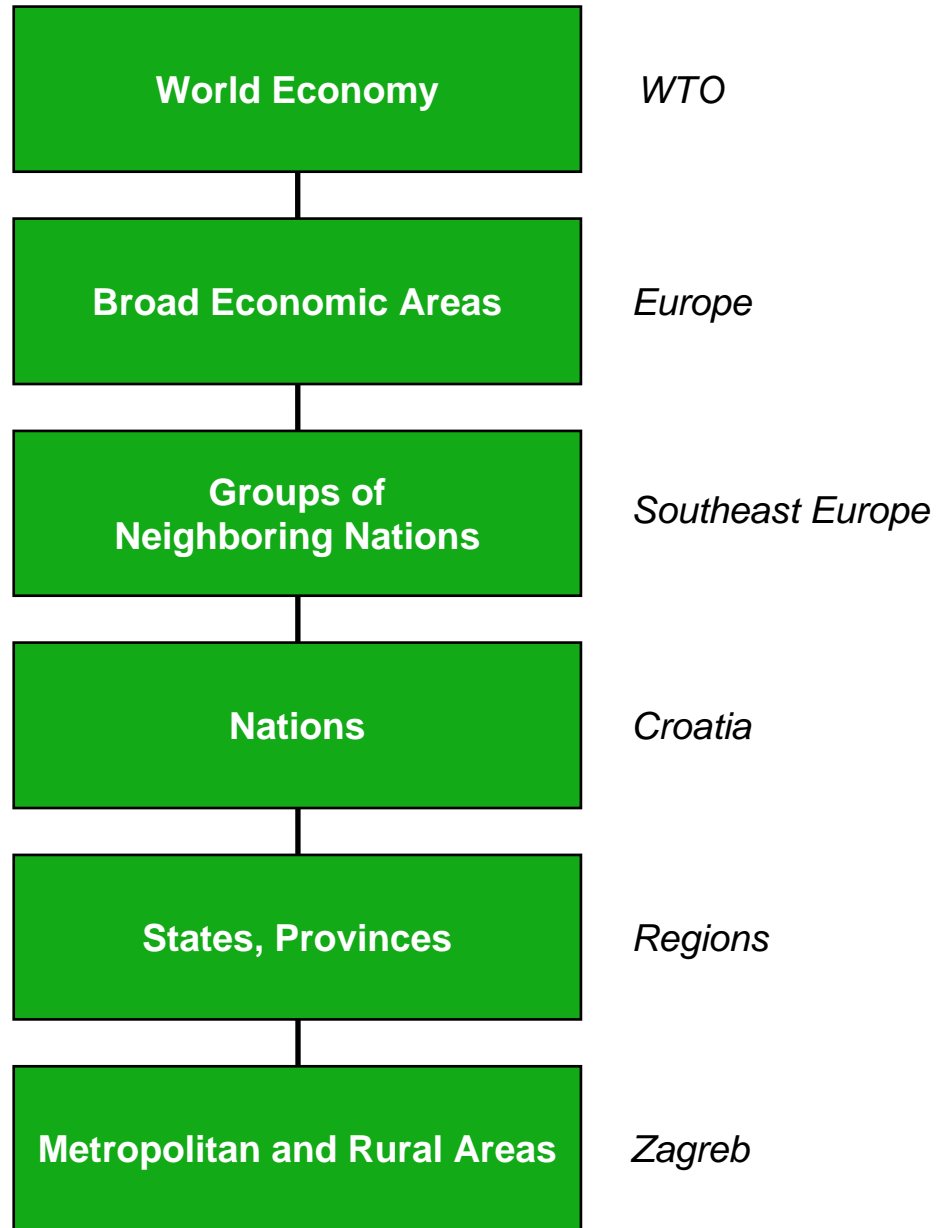
- Croatia's clusters have **developed naturally** and reflect the strengths of legacy and location but also the challenges of the current business environment conditions
  - Clusters provide an **important perspective** to understand the issues facing the Croatian economy
  - Cluster-level competitiveness efforts are **less politicized** and enable action on more tractable issues related to productivity
  - Cluster efforts are an opportunity to engage in a **new model of public-private dialogue** and cooperation
- 
- Clusters are so far an **unexploited dimension of economic policy** that Croatia can ill-afford to neglect

# Cluster-Based Policy Implementation



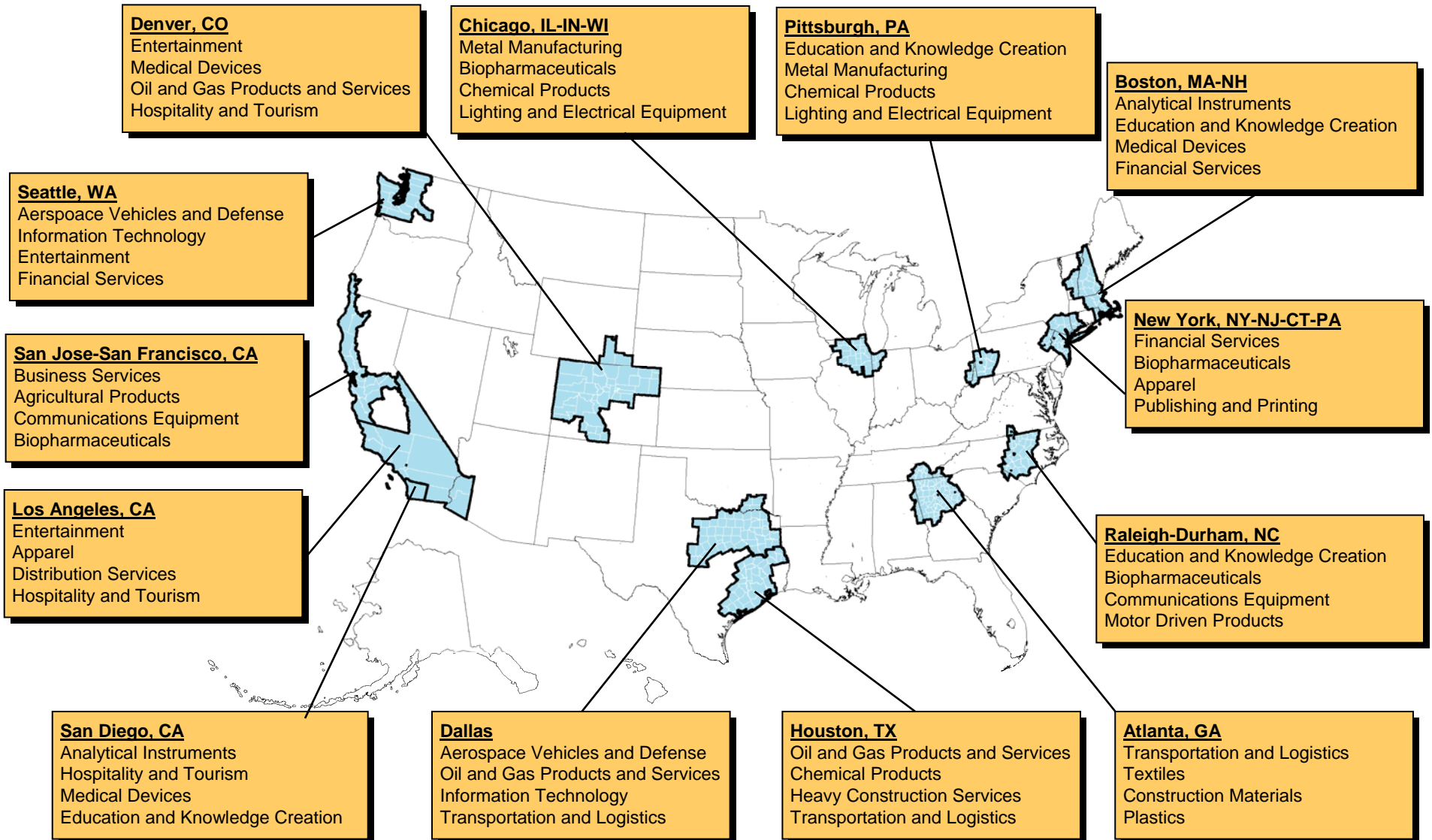
- Clusters provide a framework for **implementing public policy** and **organizing public-private collaboration** to enhance competitiveness

# Geographic Levels and Competitiveness



# Specialization by Traded Clusters

## Selected U.S. Economic Areas, 2006

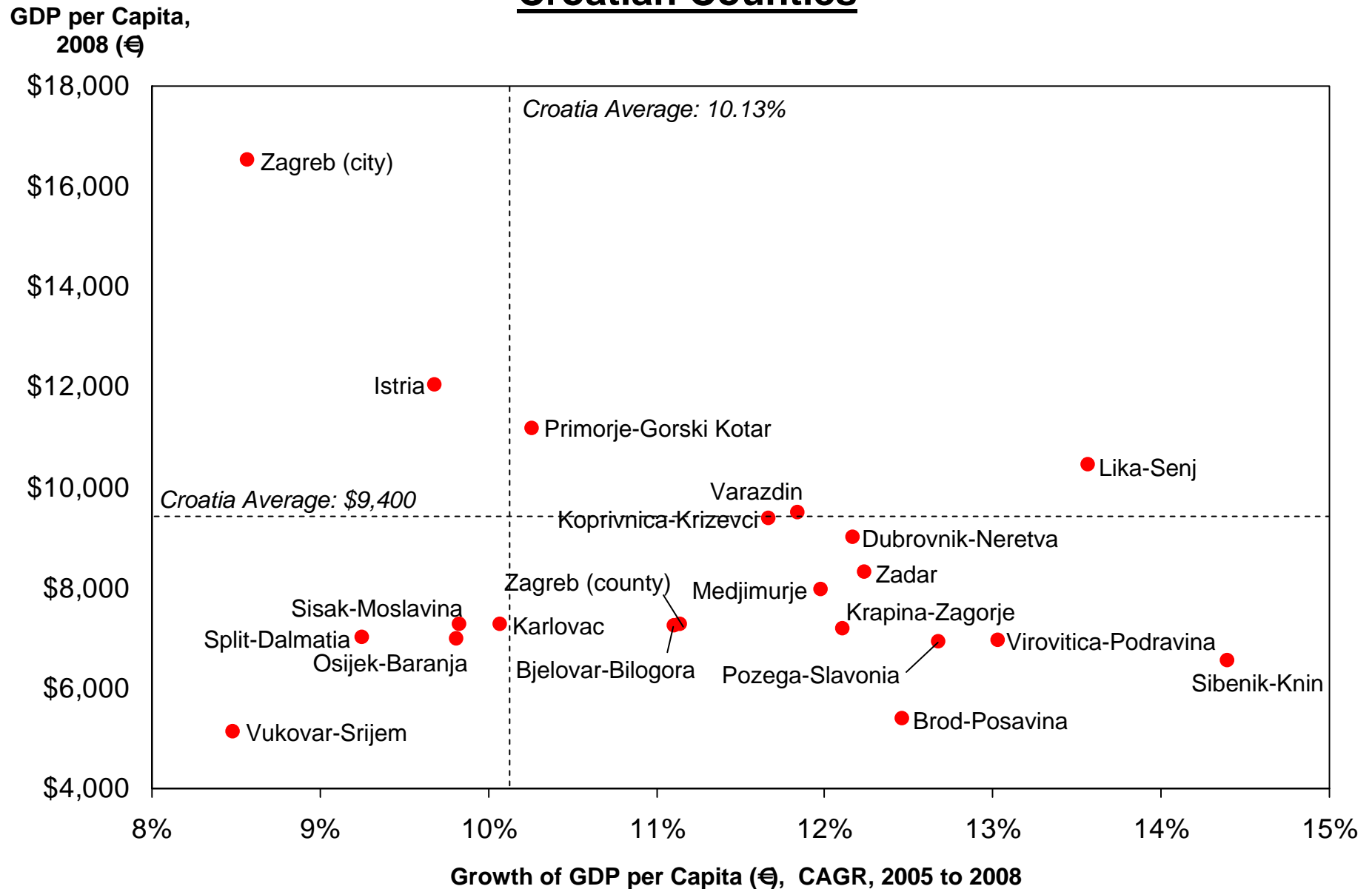


Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

# Croatian Counties



# Prosperity Performance Croatian Counties





# The Neighborhood

## Southeastern Europe



- Economic coordination among neighboring countries can significantly enhance competitiveness

# Croatia's Competitiveness Challenge

- Croatia's recent economic growth has been driven by **natural catch-up** following integration into the European and global economy
- Process can only be sustained if Croatia is able to continuously upgrade its **competitiveness**
- EU accession is an **important opportunity**, but the benefits will depend on reforms by Croatia to address its own competitiveness challenges

## Key Challenges

- There are **numerous weaknesses** in the Croatian business environment
- The **vitality of competition** remains weak as a consequence of policy choices and a relatively isolated domestic market
- **Clusters** are present in the Croatian economy (e.g. tourism), but they have not been used as an effective policy tool
- The **institutional weaknesses** of the country have been a key barrier to achieve sustain improvements
- **Croatian regions** have not been challenged and enabled to contribute to competitiveness improvements

# Croatia's Competitiveness Agenda

## Some Action Priorities

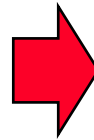
- Address **corruption** and **weaknesses in political and legal institutions**
- Ensure the sustainability of **public finances**
- Reform the **rules and regulations for business**
- Open up **local markets** to **competition**
- Create **attractive conditions** for foreign investors
- Strengthen the **higher education system**, **financial markets**, and **airport/port infrastructure**
- Use **clusters as an organizing principle** for upgrading workforce skills, infrastructure, and FDI attraction
- Support **Croatian regions** in their competitiveness efforts
- Strengthen economic cooperation in **South-East Europe**

# The Process of Economic Development

## Shifting Roles and Responsibilities

### Old Model

- **Government** drives economic development through policy decisions and incentives



### New Model

- Economic development is a **collaborative process** involving the private sector, government at multiple levels, universities, labor, and civil society

- Competitiveness must become a **bottoms-up process** in which many individuals, companies, and institutions take responsibilities
- **Every** community and cluster can take steps to enhance competitiveness
- The **private sector** must become more engaged in competitiveness to improve rapidly

# Defining a Croatian Economic Strategy

## National Economic Strategy

- What can be the **unique competitive position** of Croatia given its location, legacy, endowments, and potential strengths?
  - What is its unique value as a business location?
  - What role can it play with neighbors?
  - In what range of clusters does the nation excel?

## Developing Unique Strengths

- What are the **key potential strengths** that Croatia must preserve or build?

## Achieving and Maintaining Parity with Peers

- What **weaknesses** must be neutralized to achieve parity with peer countries?

- The **private sector** must lead the process of competitiveness improvement and provide continuity and accountability

# The Croatian Competitiveness Paradox

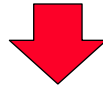
- Croatia has institutions like the **National Competitiveness Council** designed to guide competitiveness upgrading
- Croatia has sensible **plans** that identify the weaknesses the country needs to address

**BUT**

- Croatia has made **limited if any progress** on upgrading its competitiveness in recent years
- Government is preoccupied with short-term crises and EU ascension

# The Moment For Action

- The struggle for independence, the war with Serbia, and the path to political normality after the war have shifted **political focus** away from competitiveness
- **Economic growth** due to a natural catch-up has been sufficiently good so that there has not been pressure for real reform
- **EU membership** has been seen as the automatic path to competitiveness, requiring no further action within the country
- **Entrenched interest groups** in the political and economic sphere have paid lip service to competitiveness but have been unwilling to engage in real reforms that threaten the status quo



- Leaders in business and government must **launch a new chapter** in Croatia's economy if the country is to hold its gains, much less see further standard of living improvements