European Competitiveness in 2004

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MBA Lecture
University of Zagreb, Graduate School of Business and Economics
16 June 2004


Further information on Professor Porter’s work and the Institute for Strategy and Competitiveness is available at www.isc.hbs.edu
European Competitiveness 2004

• The economic climate is **weak** in most European countries, especially the large continental economies

• The prosperity catch-up to the United States has **stalled** and is now in reverse

• Europe is making **little if any progress** on the competitiveness targets set by the European Union (Lisbon-Agenda)

• The political discussion in Europe has **moved away** from a consensus focus on competitiveness
  – Other topics demand attention (Eastern accession, constitution, new commission, Stability and Growth Pact)
  – France and Germany toying with a return to Industrial Policy (Aventis, Alstom, …)
European Prosperity Over Time

GDP per Capita, US-$, PPP

European Competitiveness

Key Questions

• How does the European Union affect competitiveness in Europe?

• What are the areas to focus on for the European Union to upgrade European competitiveness?

• What are the implications for Croatia?
Measures of Competitiveness

Competitiveness

Innovative Capacity

Productivity

Prosperity
Prosperity

Compound annual growth rate of real GDP per capita, 1998-2003

GDP per capita (PPP adjusted) in US-$, 2003

Decomposing Prosperity
The EU-U.S. Gap

GDP per Hour Worked, 2000

Hours Worked per Population, 2000

Decomposing Prosperity
The EU-U.S. Gap between 1970 and 2000

Change relative to the U.S.,
1970 - 2000

GDP per Hour worked
Hours worked per Population

Working Age Population per Population
Employees per Working Age Population
Working Hours per Employee
Labor Productivity Over Time
GDP per Hour Worked

Source: Groningen Growth and Development Centre, 2004
Determinants of Productivity and Productivity Growth

Macroeconomic, Political, Legal, and Social Context for Development

Microeconomic Foundations of Development

- Sophistication of Company Operations and Strategy
- Quality of the Microeconomic Business Environment

- A sound macroeconomic, political, legal, and social context creates the potential for competitiveness, **but is not sufficient**
- Competitiveness ultimately depends on improving the microeconomic capability of the economy and the sophistication of local companies and local competition
Micro reform is needed to raise the level of sustainable prosperity

Macro reform alone can lead to short term capital inflows and growth spurts that ultimately are not sustainable

Integration of Macro- and Microeconomic Reforms

Stability and confidence support investment and upgrading

Create opportunity for productivity

Required to achieve productivity

Productivity growth allows economic growth without inflation, making macroeconomic stability easier to achieve

Macroeconomic reform

Microeconomic reform
Business Competitiveness Index 2003
Relationship with GDP Per Capita

\[ y = 2002.2x^2 + 8427.7x + 9514.9 \]
\[ R^2 = 0.8266 \]

Source: Global Competitiveness Report 2003

European Competitiveness CROATIA 06-16-04 CK.ppt
Productivity and the Business Environment

Context for Firm Strategy and Rivalry

- A local context and rules that encourage investment and sustained upgrading
  - e.g., Intellectual property protection
- Meritocratic incentive system across institutions
- Open and vigorous competition among locally based rivals

Demand Conditions

- Sophisticated and demanding local customer(s)
- Local customer needs that anticipate those elsewhere
- Unusual local demand in specialized segments that can be served regionally and globally

Factor (Input) Conditions

- Presence of high quality, specialized inputs available to firms
  - Human resources
  - Capital resources
  - Physical infrastructure
  - Administrative infrastructure
  - Information infrastructure
  - Scientific and technological infrastructure
  - Natural resources

Related and Supporting Industries

- Access to capable, locally based suppliers and firms in related fields
- Presence of clusters instead of isolated industries

Successful economic development is a process of successive economic upgrading, in which the business environment in a nation evolves to support and encourage increasingly sophisticated ways of competing.
Business Environments in Europe and the U.S.
Country Ranking by GCR Sub-Index, 2002/03

Chart showing the country ranking by Global Competitiveness Report (GCR) sub-indices for Europe and the U.S. for 2002/03. The chart includes factors such as physical infrastructure, administration, human resources, technology, capital markets, demand conditions, clusters, incentives, and competition. The United States is compared to the EU-14 average.

Note: Every horizontal line indicates one European country.
Source: Global Competitiveness Report 2002/03
Microeconomic Business Environment
Effects of European Integration

Context for Firm Strategy and Rivalry

- E.g., open access to member countries’ markets
- E.g., common standards for government aid, competition policy, and other rules
- E.g., fixed exchange rates for EMU member countries

Factor (Input) Conditions

- E.g., exchange programs for European researchers and students
- E.g., coordinated investments in European infrastructure networks

Demand Conditions

- E.g., harmonized regulations with a high level of environmental and consumer protection

Related and Supporting Industries

- E.g., increased level of competition and cooperation between regional clusters
The Boston Life Sciences Cluster

1. Health and Beauty Products
2. Surgical Instruments and Suppliers
3. Medical Equipment
4. Dental Instruments and Suppliers
5. Ophthalmic Goods
6. Diagnostic Substances
7. Containers
8. Analytical Instruments
9. Teaching and Specialized Hospitals
10. Biological Products
11. Biopharmaceutical Products
12. Research Organizations
13. Cluster Organizations
   - MassMedic, MassBio, others
14. Specialized Business Services
   - Banking, Accounting, Legal
15. Specialized Risk Capital
   - VC Firms, Angel Networks
16. Specialized Research Service Providers
   - Laboratory, Clinical Testing
17. Educational Institutions
   - Harvard University, MIT, Tufts University, Boston University, UMass

Cluster Organizations

Specialized Risk Capital

Specialized Business Services

Educational Institutions

Research Organizations

Biological Products

Biopharmaceutical Products

Teaching and Specialized Hospitals

Analytical Instruments

Health and Beauty Products

Surgical Instruments and Suppliers

Medical Equipment

Dental Instruments and Suppliers

Ophthalmic Goods

Diagnostic Substances

Containers

Analytical Instruments

Educational Institutions

Harvard University, MIT, Tufts University, Boston University, UMass
## Composition of Regional Economies
### United States, 2001

<table>
<thead>
<tr>
<th></th>
<th>Traded Clusters</th>
<th>Local Clusters</th>
<th>Natural Resource-Driven Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Share of Employment</strong></td>
<td>31.6%</td>
<td>67.6%</td>
<td>0.8%</td>
</tr>
<tr>
<td><strong>Employment Growth, 1990 to 2001</strong></td>
<td>1.7%</td>
<td>2.8%</td>
<td>-1.0%</td>
</tr>
<tr>
<td><strong>Average Wage</strong></td>
<td>$44,956</td>
<td>$28,288</td>
<td>$33,245</td>
</tr>
<tr>
<td><strong>Relative Wage</strong></td>
<td>133.8</td>
<td>84.2</td>
<td>99.0</td>
</tr>
<tr>
<td><strong>Wage Growth</strong></td>
<td>4.5%</td>
<td>3.7%</td>
<td>2.0%</td>
</tr>
<tr>
<td><strong>Relative Productivity</strong></td>
<td>144.1</td>
<td>79.3</td>
<td>140.1</td>
</tr>
<tr>
<td><strong>Patents per 10,000 Employees</strong></td>
<td>21.7</td>
<td>1.3</td>
<td>7.2</td>
</tr>
<tr>
<td><strong>Number of SIC Industries</strong></td>
<td>590</td>
<td>241</td>
<td>48</td>
</tr>
</tbody>
</table>

Note: 2001 data, except relative productivity which is 1997 data.
Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School
Types of Clusters

• There is often an **array of clusters** at different locations in a given field, each with different levels of specialization and sophistication.

• Global **innovation centers**, such as Silicon Valley in semiconductors, are few in number. If there are multiple innovation centers, they normally **specialize** in different market segments.

• Other clusters focus on **manufacturing**, outsourced **service functions**, or play the role of **regional** assembly or service centers.

• Firms based in the most advanced clusters often **seed or enhance clusters** in other locations in order to reduce the risk of a single site, access lower cost inputs, or better serve particular regional markets.

• The challenge for an economy is to move from **isolated firms** to an array of **clusters**, and then to **upgrade the breadth and sophistication** of clusters to more advanced activities.
Cluster Strength in Europe

EU-14

2 Finland
4 Italy
5 Germany
7 Denmark
8 Sweden
9 United Kingdom
10 France
14 Austria
15 Netherlands
17 Spain
18 Ireland
21 Belgium
41 Portugal
51 Greece

Accession Countries

31 Czech Republic
32 Lithuania
33 Latvia
34 Poland
40 Slovak Republic
44 Estonia
45 Slovenia
53 Hungary
68 Malta

Source: Global Competitiveness Report 2003/04
Cluster Presence
Effects of European Integration

• The European integration process removes barriers to competition that have created an artificial structure of regional clusters across Europe.

• The emerging pattern of European clusters will depend on different, sometimes countervailing forces:
  – Higher levels of competition will reduce the overall number of clusters in a given sector, and lead to concentration in the locations with the best cluster-specific business environments.
  – Lower levels of barriers to trade, investment, and communication will offer new opportunities for the creation of “satellite” clusters to take advantage of lower input costs.

• The relative quality of regional business environments will determine prosperity and attraction of economic activities across European locations:
  – Differences in regional business environment quality will be the ultimate determinant of regional prosperity across Europe.
  – If regional factor costs (wages, rents) are not flexible enough to reflect the underlying economic quality of their location, economic activity will concentrate in the most productive European locations.

• The common European currency (EMU) has removed exchange rate flexibility as the traditional lever to bring factor prices in line with relative productivity levels.
European Competitiveness

• Understanding European Competitiveness
• The Competitiveness Agenda for the EU
• Implications for Croatia
Guiding Questions

- What **policy areas** does Europe need to focus on to improve competitiveness, and what is already being done?

- Which of these should be tackled on the **EU level**, and how well is the EU equipped to enact the necessary changes?
European Business Environment

Barriers to Higher Productivity

• Labor market and social policies
  – Reduce non-wage labor costs (social security contributions)
  – Improve incentives to work (taxes)
  – …

• Competition
  – Remove existing barriers between European markets
  – Reduce subsidies
  – Reform bankruptcy laws
  – Integrate financial markets
  – …

• Mobilization of Europe’s innovative capacity
  – Modernize the university system
  – Introduce EU patent
  – Address weaknesses in education and life-long learning
  – …
European Economic Integration
Evolution

1957
Treaty of Rome

1968
Creation of the European Community (EC)

1973
Northern Extension: Denmark, Ireland, UK

1979
European Monetary System

1981
1st Southern Extension: Greece

1986
2nd Southern Extension: Portugal, Spain

1986
Single European Act

1991
Maastricht Treaty

1995
Ex-EFTA Extension: Austria, Finland, Sweden

1997
Stability and Growth Pact

1999
EMU: Fixing of Exchange Rates

2000
Lisbon European Council

2002
EMU: Euro coins in circulation

2004 / 2007(?)
Eastern Extension: Eastern European countries

2004 / 2007(?)
Eastern Extension: Eastern European countries
The Lisbon Agenda
European Council, 23/24 March 2000

“Become the most competitive and knowledge-based economy in the world economy by 2010”

Transition to a competitive knowledge-based economy

- Improve use of IT
- Create a European Research Area
- Upgrade business environment for SMEs
- Deepen the common market
- Integrate financial markets
- Strengthen coordination of macroeconomic policies

Modernization of the European Social Model

- Invest in education
- Modernize employment policy
- Reform social policy

Improve productivity
Improve labor participation
Motivation of the Lisbon Agenda

• Success of the U.S. economy in increasing productivity and prosperity from a high level, especially through the use of IT

• Apparent weaknesses of alternative approaches used in EU member countries
  – Market opening and macroeconomic stabilization (UK) alone has over time tended to exhibit falling returns
  – Wage moderation (NL) has failed to create sustainable prosperity growth and distorted market signals
  – Increasing the quality of factor conditions alone, for example through R&D investments (Sweden) is exhibiting falling returns
  – Market intervention and industrial policy (France) have fared even worse, undermining prosperity over time

• Microeconomic competitiveness is seen as a market-based approach to economic policy that can overcome the limitations of past approaches
  – Clusters are a prominent tool that is perceived as the key practical application of the competitiveness approach
Influences on Competitiveness
Multiple Geographic Levels

- **World Economy**
  - E.g., WTO

- **Broad Economic Areas**
  - E.g., European Union

- **Groups of Neighboring Nations**
  - E.g., Baltic Sea Region

- **Nations**
  - E.g., Germany

- **States, Provinces**
  - E.g., Bavaria

- **Cluster**
  - E.g., Munich Biotech
Possible Transition of the EU’s Strategic Role

Harmonization

- Open markets for goods, services, capital, and labor
- Harmonize regulations
- Limit national interventions that affect regional competition
- Upgrade physical infrastructure to common minimum standard

Support Upgrading

- Continue to open markets
- Create a level playing field in regulation, industrial policy, and infrastructure
  AND
- Support/pressure national governments to liberalize
- Support sub national / regional economic strategies
### Who is in Charge of Competitiveness?

**European Union**

- Sole responsibility for foreign trade policy
- Can take initiative in areas defined by the Treaty of the EU
  - Removal of internal frontiers, strengthening of economic and social cohesion, and establishment of economic and monetary union

**Countries**

- Sole responsibility for areas like tax and social policy, and control the implementation of EU rules
- Key role in setting and implementing EU policies

**Regions**

- In some European countries regional governments have sole responsibility for areas like planning and education
- Most European regions have a strong role in economic development efforts
Organizing A Coherent EU Competitiveness Policy

• Most EU institutions, the Commission being the prime example, are organized by **functional** specialty

• Given the political architecture of Europe, there is significant **freedom** for different policies within and across these institutions

• Competitiveness is **not** a functional specialty

• Competitiveness is a cross-functional approach that requires a **unified strategy** with coordinated activities in different functional areas
  – A Vice-President for Competitiveness in the Commission could help, but the odds of success are low

• Europe **lacks** a common understanding of the sources of economic success that could integrate policies

• Individual policies follow **inconsistent** underlying views about the merits of competition and government intervention
European Competitiveness
Priorities Reviewed

• Move towards a common view on the sources of economic prosperity

• Assign clear responsibilities for policy areas to geographical levels based on agreed set of economic and political factors

• Reorganize the structure of the EU policy process and institutions to allow consistent cross-functional strategies

• Review and implement the action agenda to remove specific barriers in the European business environment(s)

• Without progress on strategy and process it is hard to see how Europe can move effectively in those areas identified as critical
European Competitiveness

- Understanding European Competitiveness
- The Competitiveness Agenda for the EU
- Implications for Croatia
Why Should Croatia Care?

• Croatia’s economy is tightly integrated with the EU and will be strongly affected by its performance and policies

• Croatia wants to become an EU member and will be faced with the challenge to integrate into EU institutions and initiatives

• Croatia can learn from the EU’s (and its member countries’) experience in competitiveness
Stages Of Competitive Development

Factor-Driven Economy

Investment-Driven Economy

Innovation-Driven Economy

Input Cost

Efficiency

Unique Value

Opportunities of More Diverse EU Membership

Factor-Driven Economies
- Gain access to standard technology and global distribution channels
- Gain attractiveness for foreign direct investment
- Adopt tested macroeconomic, legal, and regulatory policies
- E.g., Romania

Investment-Driven Economies
- Gain access to world-class technology and innovative management techniques
- Integrate into the value chain of world class clusters, and gain support for own emerging clusters
- Improve attractiveness for foreign direct investment
- E.g., Poland

Innovation-Driven Economies
- Gain additional markets and investment opportunities, especially for advanced services to emerging clusters
- Strengthen existing clusters by outsourcing lower value-add activities to less costly locations
- E.g., Germany

For these economic opportunities to materialize, a strategy of business environment upgrading will be critical

Without it, prosperity divergence and geographic concentration of economic activity
Implications for Croatia

• Croatia needs to identify how it aims to compete as a place to do business in the world economy in the future

• Croatia then needs to mobilize a coherent strategy to remove the most pressing barriers currently on the way to that goal
  – The existing National Competitiveness Council provides a promising operational platform
  – Cooperation with regional neighbors will be important and carry both economic and political benefits

• With a clear competitiveness strategy of its own, Croatia will be able to take maximum advantage of closer ties to the EU without being dragged into a generic plan for economic development
Appendix:
Croatian Competitiveness Data
Comparative Economic Performance
Real GDP Growth Rates

Countries sorted by 1990-2002 annual real GDP growth rate (CAGR)

- Moldova
- Serbia & Montenegro
- Azerbaijan
- Poland
- Russian Federation
- Slovenia
- Slovakia
- Czech Republic
- Bulgaria
- Lithuania
- Latvia

Source: EIU (2003)
Comparative Economic Performance

Comparative Labor Productivity Performance

Compound annual growth rate of real GDP per employee, 1996-2002

GDP per employee (PPP adjusted) in US-$, 2002

Source: EIU (2003)
Decomposing Croatian GDP per Capita Growth

Contribution to change in GDP per Capita

- Labor Force Participation
- Labor Productivity

Source: EIU (2003)
Unemployment in Transition Countries

Unemployment Rate, 2002

Change of Unemployment Rate in Percentage Points, 1995 - 2002

Source: EIU (2003)
Croatia’s Export Performance

World Export Market Shares

Source: WTO (2002)
Comparative Inward Foreign Investment
Selected Economies

FDI Stocks as % of GDP, Average 1998-2000

FDI Inflows as % of Gross Fixed Capital Formation, Average 1998-2000

Note: FDI Stocks and Inflows for transition countries are the average of 1998-2001
Germany’s FDI inflows in this period were exceptionally high due to the Vodafone-Mannesmann takeover in 2000
Global Competitiveness Report 2003
The Relationship Between Business Competitiveness and GDP Per Capita

Source: Global Competitiveness Report 2003
European Competitiveness CROATIA 06-16-04 CK.ppt

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Current Competitiveness Index
Croatia’s Position over Time

Note: Constant sample of countries
Source: Global Competitiveness Report 2003
Determinants of Productivity and Productivity Growth

Macroeconomic, Political, Legal, and Social Context for Development

Microeconomic Foundations of Development

- Sophistication of Company Operations and Strategy
- Quality of the Microeconomic Business Environment
## Company Operations and Strategy
### Croatia’s Relative Position 2003

### Competitive Advantages Relative to GDP per Capita

<table>
<thead>
<tr>
<th>Factor</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of Foreign Technology Licensing</td>
<td>21</td>
</tr>
<tr>
<td>Control of International Distribution</td>
<td>33</td>
</tr>
<tr>
<td>Nature of Competitive Advantage</td>
<td>42</td>
</tr>
<tr>
<td>Capacity for Innovation</td>
<td>43</td>
</tr>
<tr>
<td>Extent of Branding</td>
<td>48</td>
</tr>
<tr>
<td>Value Chain Presence</td>
<td>51</td>
</tr>
<tr>
<td>Company Spending on R&amp;D</td>
<td>53</td>
</tr>
<tr>
<td>Willingness to Delegate Authority</td>
<td>62</td>
</tr>
</tbody>
</table>

### Competitive Disadvantages Relative to GDP per Capita

<table>
<thead>
<tr>
<th>Factor</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breadth of International Markets</td>
<td>82</td>
</tr>
<tr>
<td>Extent of Regional Sales</td>
<td>77</td>
</tr>
<tr>
<td>Degree of Customer Orientation</td>
<td>73</td>
</tr>
<tr>
<td>Extent of Staff Training</td>
<td>72</td>
</tr>
<tr>
<td>Reliance on Professional Management</td>
<td>67</td>
</tr>
<tr>
<td>Extent of Incentive Compensation</td>
<td>66</td>
</tr>
<tr>
<td>Production Process Sophistication</td>
<td>65</td>
</tr>
<tr>
<td>Extent of Marketing</td>
<td>65</td>
</tr>
</tbody>
</table>

**Note:** Rank by countries; overall Croatia ranks 62 (65 on Company Operations and Strategy, 40 on GDP pc 2002)

Source: Global Competitiveness Report 2003
Determinants of Productivity and Productivity Growth

Macroeconomic, Political, Legal, and Social Context for Development

Microeconomic Foundations of Development

Sophistication of Company Operations and Strategy

Quality of the Microeconomic Business Environment
National Business Environment Overview
Croatia’s Relative Strengths and Weaknesses

Overall rank: 57

Source: Global Competitiveness Report 2003
### Factor (Input) Conditions

#### Croatia’s Relative Position

#### Competitive Advantages Relative to GDP per Capita

<table>
<thead>
<tr>
<th>Factor</th>
<th>Rank</th>
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</thead>
<tbody>
<tr>
<td>Extent of Bureaucratic Red Tape</td>
<td>9</td>
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<tr>
<td>Patents per million Population (2002)</td>
<td>30</td>
</tr>
<tr>
<td>Internet users per 100 people (2002)</td>
<td>33</td>
</tr>
<tr>
<td>Cell phones per 100 people (2002)</td>
<td>34</td>
</tr>
<tr>
<td>Quality of Math and Science Education</td>
<td>35</td>
</tr>
<tr>
<td>Quality of Scientific Research Institutions</td>
<td>40</td>
</tr>
<tr>
<td>Quality of Public Schools</td>
<td>40</td>
</tr>
<tr>
<td>Availability of Scientists and Engineers</td>
<td>41</td>
</tr>
<tr>
<td>Telephone/Fax Infrastructure Quality</td>
<td>41</td>
</tr>
<tr>
<td>University/Industry Research Collaboration</td>
<td>44</td>
</tr>
<tr>
<td>Quality of Electricity Supply</td>
<td>50</td>
</tr>
<tr>
<td>Administrative Burden for Start-Ups</td>
<td>51</td>
</tr>
<tr>
<td>Quality of Educational System</td>
<td>52</td>
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</table>

#### Competitive Disadvantages Relative to GDP per Capita

<table>
<thead>
<tr>
<th>Factor</th>
<th>Rank</th>
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<tbody>
<tr>
<td>Port Infrastructure Quality</td>
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<td>Overall Infrastructure Quality</td>
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<td>Quality of Management Schools</td>
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<td>Judicial Independence</td>
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<td>Financial Market Sophistication</td>
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<td>Local Equity Market Access</td>
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<td>Air Transport Infrastructure Quality</td>
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<td>Adequacy of Public Sector Legal Recourse</td>
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<td>Railroad Infrastructure Quality</td>
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<td>Venture Capital Availability</td>
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<tr>
<td>Police Protection of Businesses</td>
<td>60</td>
</tr>
<tr>
<td>Ease of Access to Loans</td>
<td>58</td>
</tr>
</tbody>
</table>

**Country Ranking, Arrows indicate a change of 5 or more ranks since 2002**

**Note:** Rank by countries; overall Croatia ranks 62 (57 on National Business Environment, 40 on GDP pc 2002)

**Source:** Global Competitiveness Report 2003

**European Competitiveness CROATIA 06-16-04 CK.ppt**
Note: Other Latin American countries have negligible rates of US patenting.
# Innovative Capacity Index
## 2003 Rankings

<table>
<thead>
<tr>
<th>Rank</th>
<th>Scientists &amp; Engineers Index</th>
<th>Innovation Policy Index</th>
<th>Cluster Environment Index</th>
<th>Linkages Index</th>
<th>Operations and Strategy Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>..</td>
<td>..</td>
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<tr>
<td>41</td>
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<td>Romania</td>
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<td>43</td>
<td>Argentina</td>
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<td>Costa Rica</td>
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<td>Egypt</td>
<td>Indonesia</td>
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<td>47</td>
<td>Mauritius</td>
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<tr>
<td>53</td>
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Source: Global Competitiveness Report 2003
### U.S. Patenting by Croatian Organizations

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</table>

### Context for Firm Strategy and Rivalry

**Croatia’s Relative Position**

#### Competitive Advantages Relative to GDP per Capita

- Centralization of Economic Policy-making: 36
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*Note: Rank by countries; overall Croatia ranks 62 (57 on National Business Environment, 40 on GDP pc 2002)*

*Source: Global Competitiveness Report 2003*
**Context for Firm Strategy and Rivalry**  
**Croatia’s Relative Position (Continued)**

<table>
<thead>
<tr>
<th>Competitive Advantages</th>
<th>Competitive Disadvantages</th>
<th>Country Ranking, Arrows indicate a change of 5 or more ranks since 2002</th>
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<td>Relative to GDP per Capita</td>
<td>Relative to GDP per Capita</td>
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<tr>
<td>Intellectual Property Protection</td>
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<td>Favoritism in Decisions of Government Officials</td>
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<tr>
<td>Decentralization of Corporate Activity</td>
<td>63</td>
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<tr>
<td>Effectiveness of Anti-Trust Policy</td>
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<tr>
<td>Intensity of Local Competition</td>
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<tr>
<td>Hidden Trade Barrier Liberalization</td>
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Note: Rank by countries; overall Croatia ranks 62 (57 on National Business Environment, 40 on GDP pc 2002)  
Source: Global Competitiveness Report 2003
Demand Conditions
Croatia’s Relative Position

Competitive Advantages
Relative to GDP per Capita

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Country Ranking, Arrows indicate a change of 5 or more ranks since 2002

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Country Ranking, Arrows indicate a change of 5 or more ranks since 2002

Note: Rank by countries; overall Croatia ranks 62 (57 on National Business Environment, 40 on GDP pc 2002)
Source: Global Competitiveness Report 2003
Related and Supporting Industries
Croatia’s Relative Position

Competitive Advantages Relative to GDP per Capita

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<tr>
<td>Extent of Product and Process Collaboration</td>
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<tr>
<td>Local Availability of Specialized Research and Training Services</td>
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<tr>
<td>Local Availability of Process Machinery</td>
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<tr>
<td>Local Availability of Components and Parts</td>
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<td>Local Supplier Quantity</td>
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Country Ranking, Arrows indicate a change of 5 or more ranks since 2002

Competitive Disadvantages Relative to GDP per Capita

<table>
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<tr>
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<td>State of Cluster Development</td>
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<tr>
<td>Local Supplier Quality</td>
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Country Ranking, Arrows indicate a change of 5 or more ranks since 2002

Note: Rank by countries; overall Croatia ranks 62 (57 on National Business Environment, 40 on GDP pc 2002)
Source: Global Competitiveness Report 2003