Portuguese Competitiveness

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Novos Desafios da Competitividade
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Portuguese Economic Strategy 1995 to 2001

- Secure entry to the European Monetary Union
- Reduce public sector deficits
- Bring down inflation
- Adopt the required European Union regulations

- As of 2001, all these goals were achieved
- The sustainability of Portugal’s economic growth is uncertain
- A new national economic strategy will be necessary
Sources of Prosperity

• A nation’s standard of living (wealth) is determined by the **productivity** with which it uses its human, capital, and natural resources. The appropriate definition of competitiveness is productivity.
  
  – Productivity depends both on the **value** of products and services (e.g. uniqueness, quality) as well as the **efficiency** with which they are produced.
  
  – It is not **what** industries a nation competes in that matters for prosperity, but **how** firms compete in those industries.
  
  – Productivity in a nation is a reflection of what both domestic and foreign firms **choose to do in that location**. The location of ownership is secondary for national prosperity.
  
  – The productivity of “**local**” industries is of fundamental importance to competitiveness, not just that of traded industries.
  
  – **Devaluation** does not make a country more “competitive”

• Nations compete in offering the **most productive environment** for business.

• The public and private sectors play **different but interrelated roles** in creating a productive economy.
Determinants of Productivity and Productivity Growth

- A sound macroeconomic, political, social, and legal 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 competition
Innovation and Prosperity

Prosperity

Productivity

“Incompetiveness”

Innovative Capacity

- Innovation is **more than just scientific discovery**
- There are **no low-tech industries**, only low-tech firms
Productivity and the Microeconomic Business Environment

Context for Firm Strategy and Rivalry

Factor (Input) Conditions

- High quality, specialized inputs available to firms:
  - human resources
  - capital resources
  - physical infrastructure
  - administrative infrastructure
  - information infrastructure
  - scientific and technological infrastructure
  - natural resources

Demand Conditions

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

Related and Supporting Industries

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

• The microeconomic business environment consist of the array of assets, information, rules, policies, and institutions surrounding competition

• A local context that encourages efficiency, investment, and sustained upgrading
• Open and vigorous competition among locally based rivals
The California Wine Cluster

Sources: California Wine Institute, Internet search, California State Legislature. Based on research by MBA 1997 students R. Alexander, R. Arney, N. Black, E. Frost, and A. Shivananda.
Agenda

- Portugal’s economic performance
- Portugal’s competitiveness
Relative Economic Performance
Level and Growth Rate of GDP per Capita, 1990-2000

GDP per Capita, 2000
- Green: 1990-1995
- Blue: 1995-2000

Source: EIU
Portugal Economic Performance

Annual Catch-Up Rates to US GDP per Capita Levels, 1970-1999

Level of GDP per Capita relative to the US, Beginning of Period

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Source: OECD
Macroeconomic Imbalances
Portugal

Private Sector Saving
Public Sector Saving

% of GDP

Note: The drop in private sector saving since 1995 is in roughly equal parts driven by households decreasing savings and companies increasing debts
Source: OECD
Comparative Economic Performance
EU Structural and Cohesion Funds for Portugal

Source: European Commission
Comparative Economic Performance
Productivity Growth in Manufacturing, Selected Countries

Note: Sorted by overall productivity growth 1991-2000
Source: European Commission
Comparative Innovation Performance
Selected Countries and European Union

EU Patents per million people, 1997-99 average

Portugal 2.7
Greece 6.2
Spain 18.5
Italy 59.7
France 116.5
EU-15 119.4

Source: European Commission
Portuguese Economic Performance 1995 to 2001

Performance

• Solid economic growth
• Very slow productivity growth
• Extremely low innovation rates
• No microeconomic competitiveness strategy
• Sustainability of macroeconomic policies in question
Portugal’s Competitive Position in 2002

• Easy catch-up period is over
• Reduction of EU structural funds is likely
• Ability to use devaluation to prop up “competitiveness” is gone
• Eastern European countries with lower wages are about to enter EU market

• What is the new economic strategy to deal with this environment?
Agenda

• Portugal’s economic performance

• Portugal’s competitiveness
Portuguese Diamond in 1994
Findings from “The Competitiveness of Portugal”-study

**Context for Firm Strategy and Rivalry**
- Goals discourage upgrading
- Strategies do not emphasize upgrading and exporting

**Factor (Input) Conditions**
- Lack of skilled workforce and management
- Low level of R&D
- High energy costs
- Inefficient capital markets
- Infrastructure still lagging despite some recent improvements

**Demand Conditions**
- Relatively unsophisticated local consumer and industrial demand

**Related and Supporting Industries**
- Significant regional clusters
- Insufficient linkages
- Lack of strong related and supported industries even in most significant clusters

**Source:** Monitor Company

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# Factor (Input) Conditions

## Portugal’s Relative Position

<table>
<thead>
<tr>
<th>Competitive Advantages Relative to GDP per Capita</th>
<th>Country Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Infrastructure Quality</td>
<td>18</td>
</tr>
<tr>
<td>Ease of Access to Loans</td>
<td>19</td>
</tr>
<tr>
<td>Local Equity Market Access</td>
<td>23</td>
</tr>
<tr>
<td>Availability and Cost of Cellular Phones</td>
<td>23</td>
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<tr>
<td>Financial Market Sophistication</td>
<td>24</td>
</tr>
<tr>
<td>Venture Capital Availability</td>
<td>24</td>
</tr>
<tr>
<td>Police Protection of Businesses</td>
<td>25</td>
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<tr>
<td>Speed and Cost of Internet Access</td>
<td>25</td>
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<tr>
<td>Quality of Math and Science Education</td>
<td>56</td>
</tr>
<tr>
<td>Availability of Scientists and Engineers</td>
<td>50</td>
</tr>
<tr>
<td>Port Infrastructure Quality</td>
<td>45</td>
</tr>
<tr>
<td>Quality of Scientific Research Inst.</td>
<td>41</td>
</tr>
<tr>
<td>Administrative Burden for Start-Ups</td>
<td>41</td>
</tr>
<tr>
<td>Quality of Public Schools</td>
<td>40</td>
</tr>
<tr>
<td>Railroad Infrastructure Quality</td>
<td>40</td>
</tr>
<tr>
<td>Air Transport Infrastructure Quality</td>
<td>39</td>
</tr>
<tr>
<td>Extent of Bureaucratic Red Tape</td>
<td>39</td>
</tr>
<tr>
<td>University/Industry R&amp;D Collaboration</td>
<td>38</td>
</tr>
<tr>
<td>Patents per Capita (2000)</td>
<td>37</td>
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<tr>
<td>Quality of Management Schools</td>
<td>36</td>
</tr>
<tr>
<td>Adequacy of Private Sector Legal Recourse</td>
<td>34</td>
</tr>
</tbody>
</table>

Note: Rank by countries; overall Portugal ranks 31 (29 on Quality of the National Business Environment)

Source: Global Competitiveness Report 2001
Educational Attainment
Southern European Countries and Regions

Share of 25-59 year old by level of educational attainment

Source: European Commission
### Context for Firm Strategy and Rivalry

#### Portugal’s Relative Position

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<td>Intellectual Property Protection</td>
<td>23</td>
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<tr>
<td>Hidden Trade Barrier Liberalization</td>
<td>24</td>
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<td>Tariff Liberalization</td>
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<tr>
<td>Efficacy of Corporate Boards</td>
<td>53</td>
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<tr>
<td>Extent of Distortive Government Subsidies</td>
<td>51</td>
</tr>
<tr>
<td>Decentralization of Corporate Activity</td>
<td>47</td>
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<tr>
<td>Cooperation in Labor-Employer Relations</td>
<td>40</td>
</tr>
<tr>
<td>Extent of Locally Based Competitors</td>
<td>36</td>
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<tr>
<td>Intensity of Local Competition</td>
<td>33</td>
</tr>
<tr>
<td>Effectiveness of Anti-Trust Policy</td>
<td>30</td>
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**Source:** Global Competitiveness Report 2001
Investments in Research & Development
Private Sector R&D Expenditure

Share of GDP, 1999

Source: OECD
Difficulty of Business Formation
Selected OECD Countries

Cost of Business Formation relative to GDP per capita

Source: Freeman (2001)
## Demand Conditions
### Portugal’s Relative Position

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<td></td>
<td>Government Procurement of Advanced Technology Products 31</td>
</tr>
<tr>
<td></td>
<td>Stringency of Environmental Regulations 28</td>
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<tr>
<td></td>
<td>Presence of Demanding Regulatory Standards 28</td>
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<td></td>
<td>Laws Relating to Information Technology 28</td>
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<td></td>
<td>Buyer Sophistication 27</td>
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<td></td>
<td>Consumer Adoption of Latest Products 26</td>
</tr>
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Note: Rank by countries; overall Portugal ranks 31 (29 on Quality of the National Business Environment)
Source: Global Competitiveness Report 2001
Related and Supporting Industries
Portugal’s Relative Position

Competitive Advantages
Relative to GDP per Capita

Competitive Disadvantages
Relative to GDP per Capita

Country Ranking
Local Availability of Process Machinery 42
Local Supplier Quality 41
Local Availability of Specialized Research and Training Services 41
Local Availability of Information Technology Services 41
Extent of Product and Process Collaboration 38
Local Availability of Components and Parts 34
Local Supplier Quantity 31
State of Cluster Development 29

Note: Rank by countries; overall Portugal ranks 31 (29 on Quality of the National Business Environment)
Source: Global Competitiveness Report 2001
Portuguese Diamond in 2002

**Factor (Input) Conditions**
- Lack of skilled workforce and management
- Low level of scientific and technological infrastructure
- Infrastructure still lagging despite some recent improvements

**Demand Conditions**
- Relatively unsophisticated local consumer and industrial demand

**Related and Supporting Industries**
- Significant regional clusters
- Insufficient linkages within clusters
- Lack of strong related and supported industries even in most significant clusters

**Context for Firm Strategy and Rivalry**
- Administrative barriers to business formation
- Lack of local rivalry
- Low level of private R&D expenditure
Portuguese Clusters

Footwear

Cluster institutions
(APPICAPS, APIC, CTC)

Leather Footwear Manufacturers

Leather belts
Leather clothing
Leather handbags
Leather gloves
Textiles and fashion Clusters

Recognized brands
Local software developers

International brands
International distributors
Marketing and distribution
Branding

Shoe design
Processed leather
Footwear machinery
Machinery suppliers

Leather Cluster
Local software developers

Government

Universities and R&D institutions

Cluster institutions
(APPICAPS, APIC, CTC)

Source: Research by HBS MBA students M Abecasis, E Cernoia, M Pita, and S Morais
Portuguese Clusters
Footwear

• Cluster analyzed in the 1994 study
  – Concentrated around Porto
  – Competing on price and low wage
  – Low productivity, poor relations to suppliers, low level of product
differentiation, and limited understanding of consumer needs

• Situation in 2002
  – Increasing competition from low cost locations in Asia
  – Moderate improvements in productivity, response times, and technical
efficiency
  – Still poor relations to related and supporting industries
  – Active cluster organization APICCAPS; recently launched “Portugal Quality
Shoes” re-branding initiative
  – In a contracting world shoe market, Portuguese export market share has
slightly increased to 6.1% between 1995 and 1999

• Progress suggests potential of cluster development in Portugal
  • No concerted commitment across the country

Note: Draws on research by HBS MBA students M Abecasis, E Cernoia, M Pita, and S Morais
Portuguese Competitiveness
1994 versus 2002

• Portugal has made important progress on macroeconomic terms

• Progress on the microeconomic foundations of competitiveness has been largely absent
  – There are exceptions (E.g., reduction of government subsidies, privatizations, creation of a more independent anti-trust authority)
  – The exceptions were more a by-product of adopting EU rules than part of a competitiveness strategy

• Portugal must address its microeconomic weaknesses if it is to improve or even sustain its prosperity
Portugal in 2002
The Need for a New Strategy

• The central challenge is microeconomic

• Portugal’s new strategy must focus on competitiveness and productivity
  – A long-term program to upgrade the business environment
  – A long-term program to build innovative capacity

• Aggressive cluster development throughout the economy must become a national priority

• Leaders must create a national economic vision to inspire and motivate the Portuguese people