

# Building a Competitive U.A.E Economy: The New Learning

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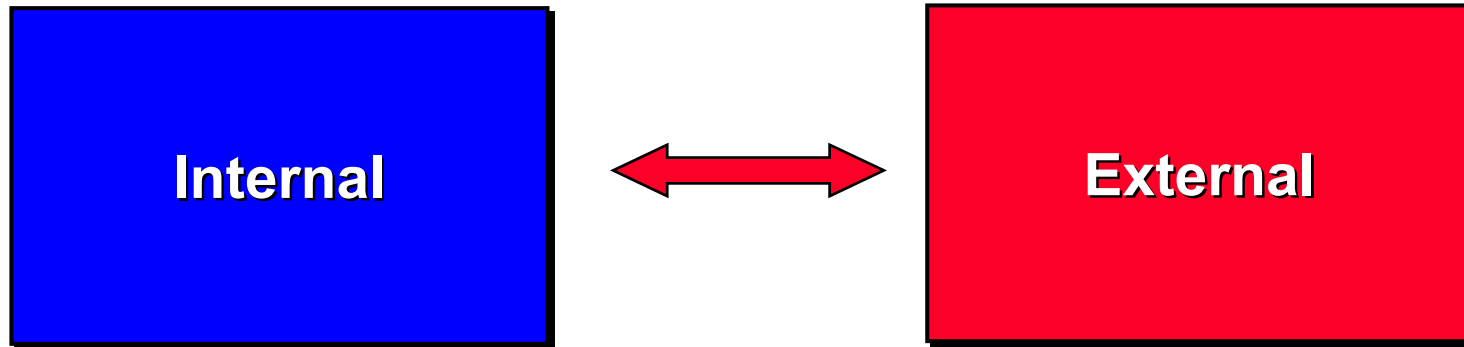
*Dubai, United Arab Emirates*  
7 May, 2003

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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), "Building the Microeconomic Foundations of Competitiveness," in *The Global Competitiveness Report 2002*, (World Economic Forum, 2002), "Clusters and the New Competitive Agenda for Companies and Governments" in *On Competition* (Harvard Business School Press, 1998), and ongoing research on clusters and competitiveness. 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. Further information on Professor Porter's work and the Institute for Strategy and Competitiveness is available at [www.isc.hbs.edu](http://www.isc.hbs.edu)

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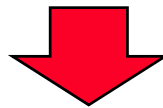
# Perspectives on Firm Success



- 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

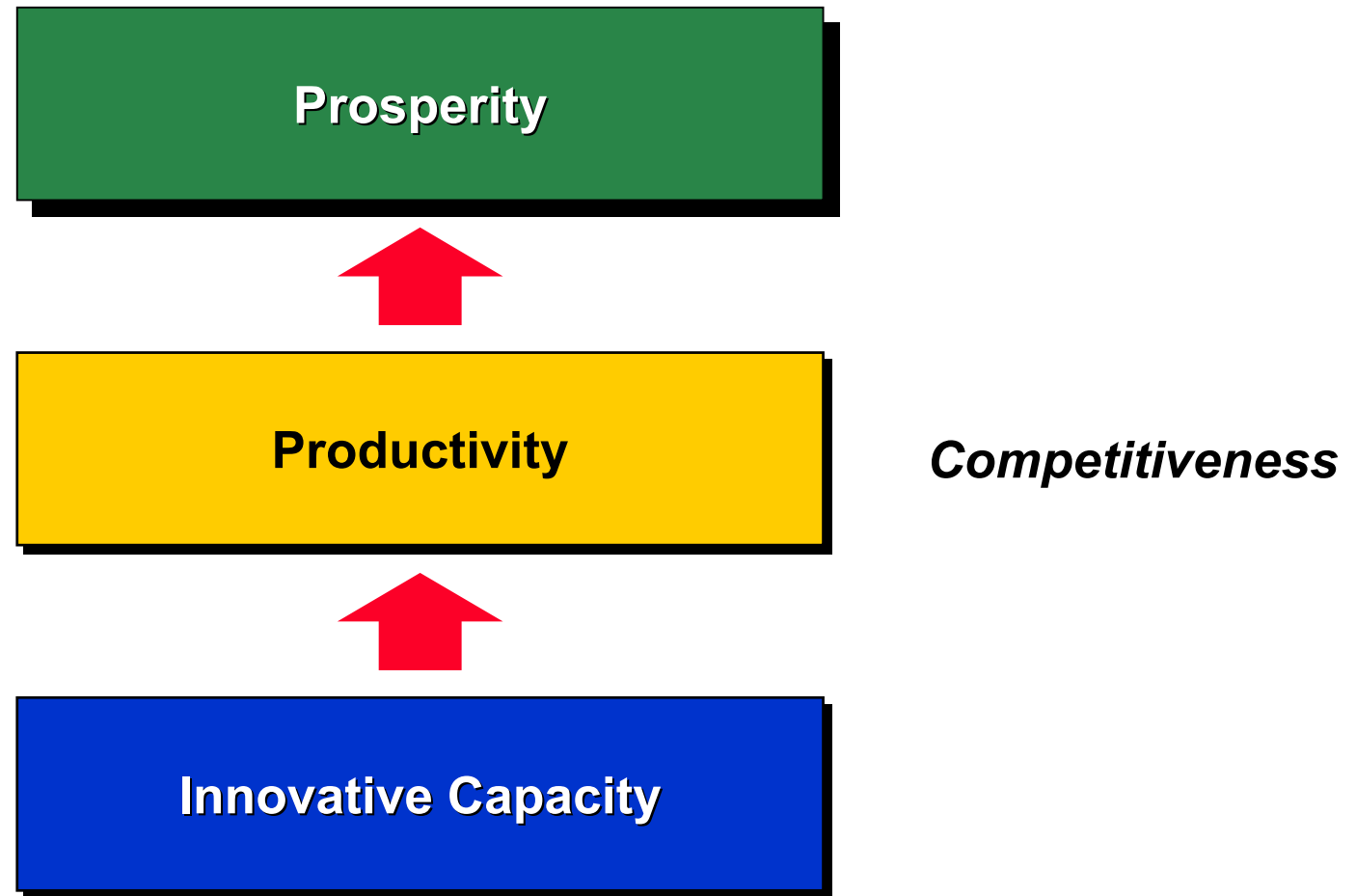
# What is Competitiveness?

- Competitiveness is determined by the **productivity** with which a nation uses its human, capital, and natural resources. Productivity sets a nation's or region's standard of living (wages, returns to capital, returns to natural resource endowments)
  - 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

# Innovation and Competitiveness

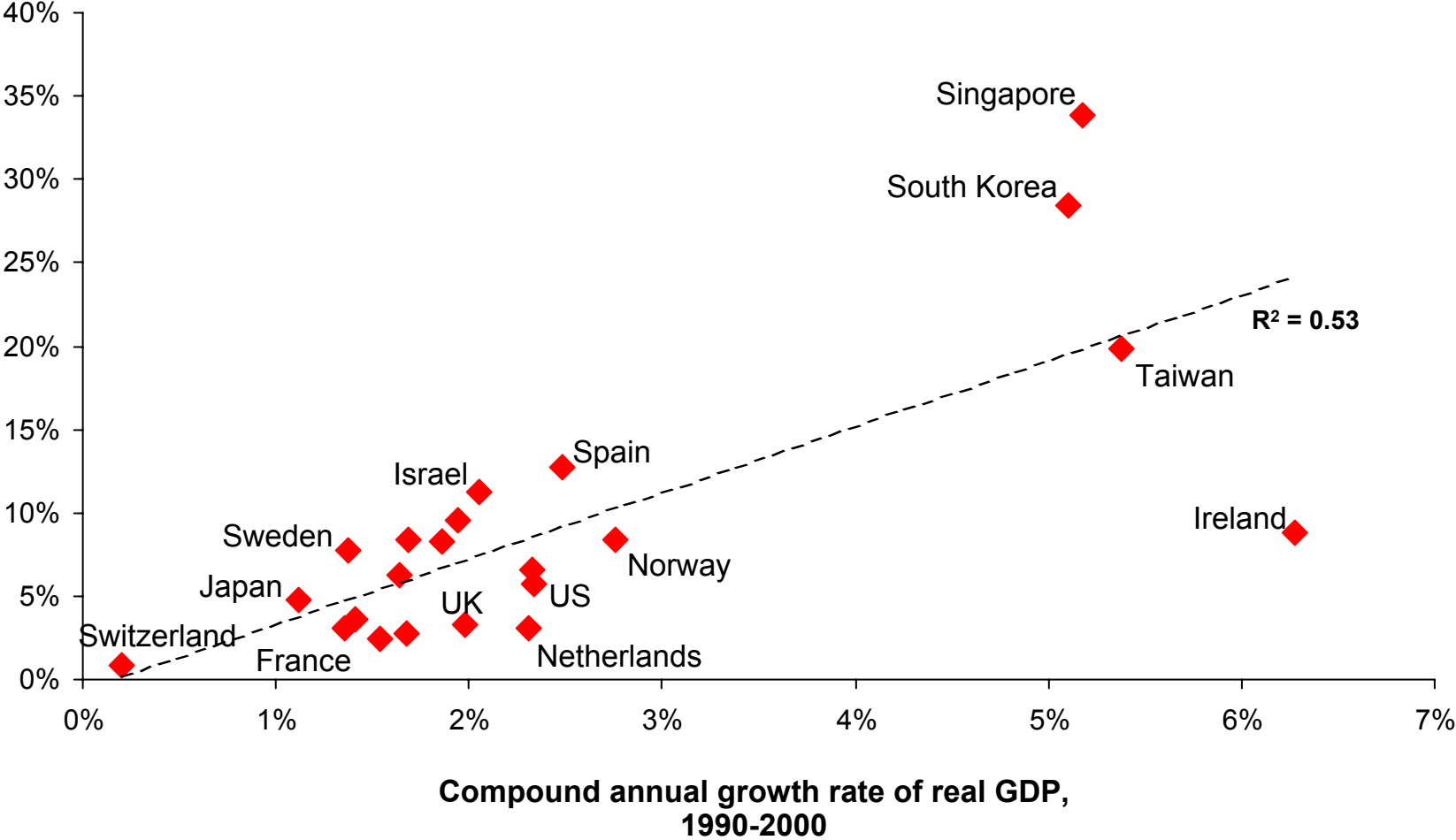


- Innovation is **more than just scientific discovery**
- There are **no low-tech industries**, only low-tech firms

# Patenting Growth and Prosperity Growth

## Selected OECD Countries

**Compound annual growth rate of US-registered patents, 1990 - 2001**



Source: IMF (2001), US Patent and Trademark Office (2002)

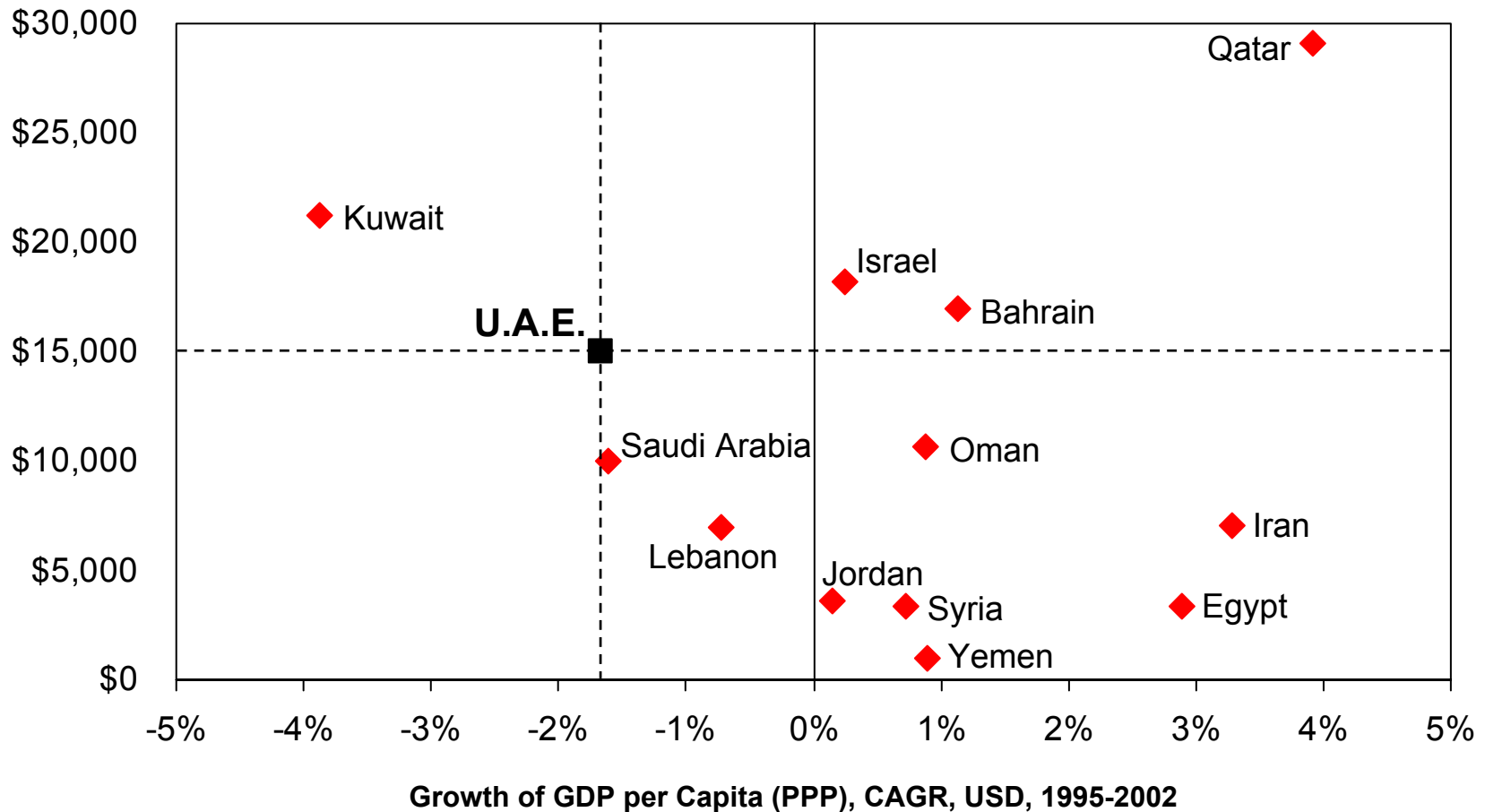
# United Arab Emirates' Economic Situation 2003

- The United Arab Emirates has registered **high real GDP growth** rates since 1995, surpassed in the region only by Qatar
- **Labor productivity** has been relatively high, but has lagged peer countries as more people entered the labor force
- The U.A.E. has attracted increasing amounts of **foreign direct investment** (FDI)
- The U.A.E. economy has made progress in moving away from a sole **dependence on oil products**, especially in Dubai
- However, the U.A.E. will need to **embrace many changes** if it is to become a truly competitive economy and advance to the next level of prosperity

# Comparative Economic Performance

## Middle Eastern Countries

GDP per Capita  
(PPP), USD, 2002

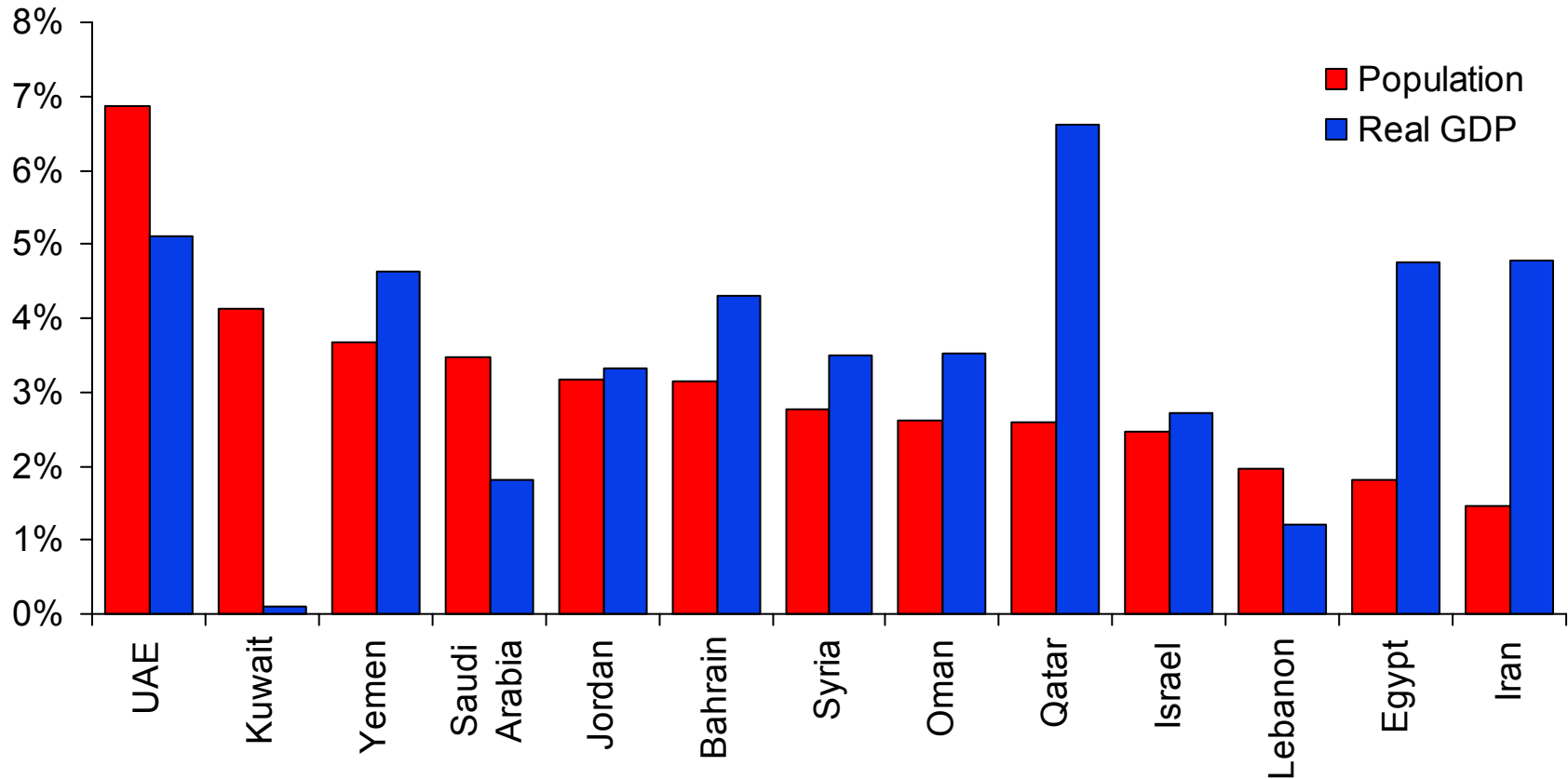


- The U.A.E.'s **prosperity level is high**, but with **negative growth** over the post-1995 period it has lost ground to many peers

# Growth of Population and Real GDP

## Middle Eastern Countries

Growth Rate,  
CAGR,  
1995 - 2002

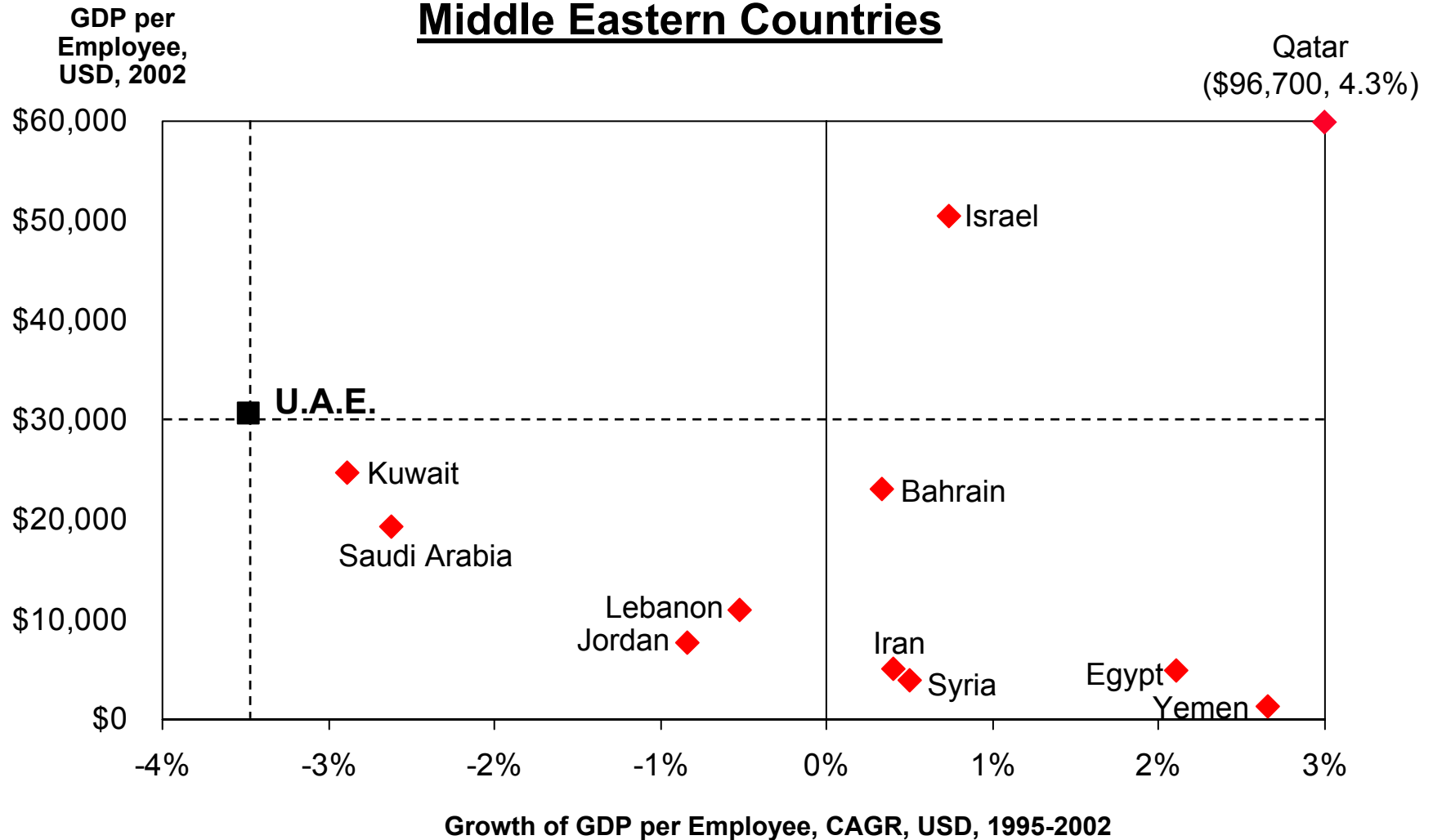


- With the **highest population growth in the region**, the UAE's high GDP growth rate was insufficient to raise average prosperity levels



# Comparative Labor Productivity Performance

## Middle Eastern Countries



- The U.A.E. has a **higher labor productivity** than many Arab peers, but has registered **negative labor productivity growth** since 1995

# Determinants of Productivity and Productivity Growth

**Macroeconomic, Political, Legal, and Social  
Context for Development**

## **Microeconomic Foundations of Development**

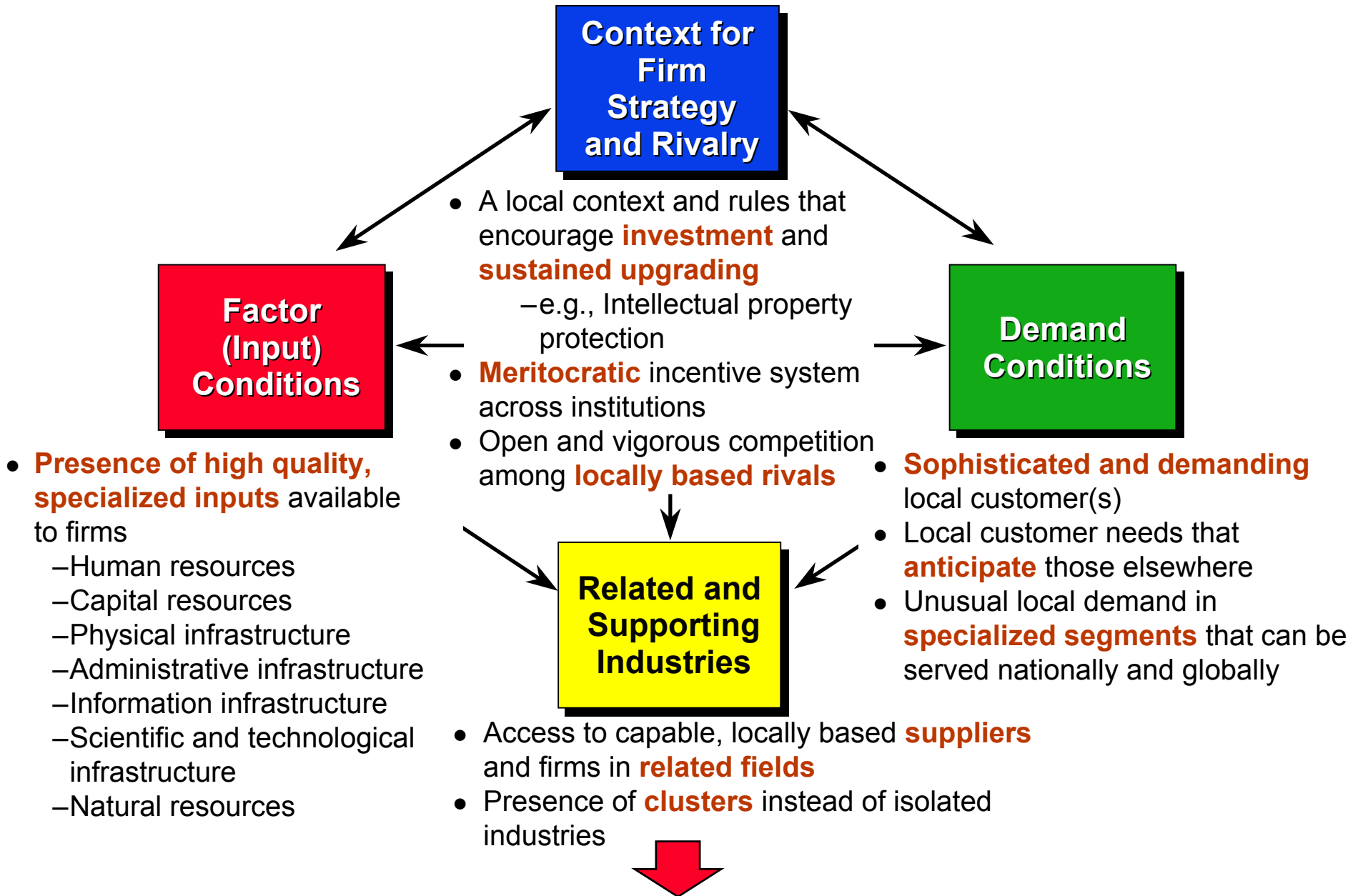
**Sophistication  
of Company  
Operations and  
Strategy**



**Quality of the  
Microeconomic  
Business  
Environment**

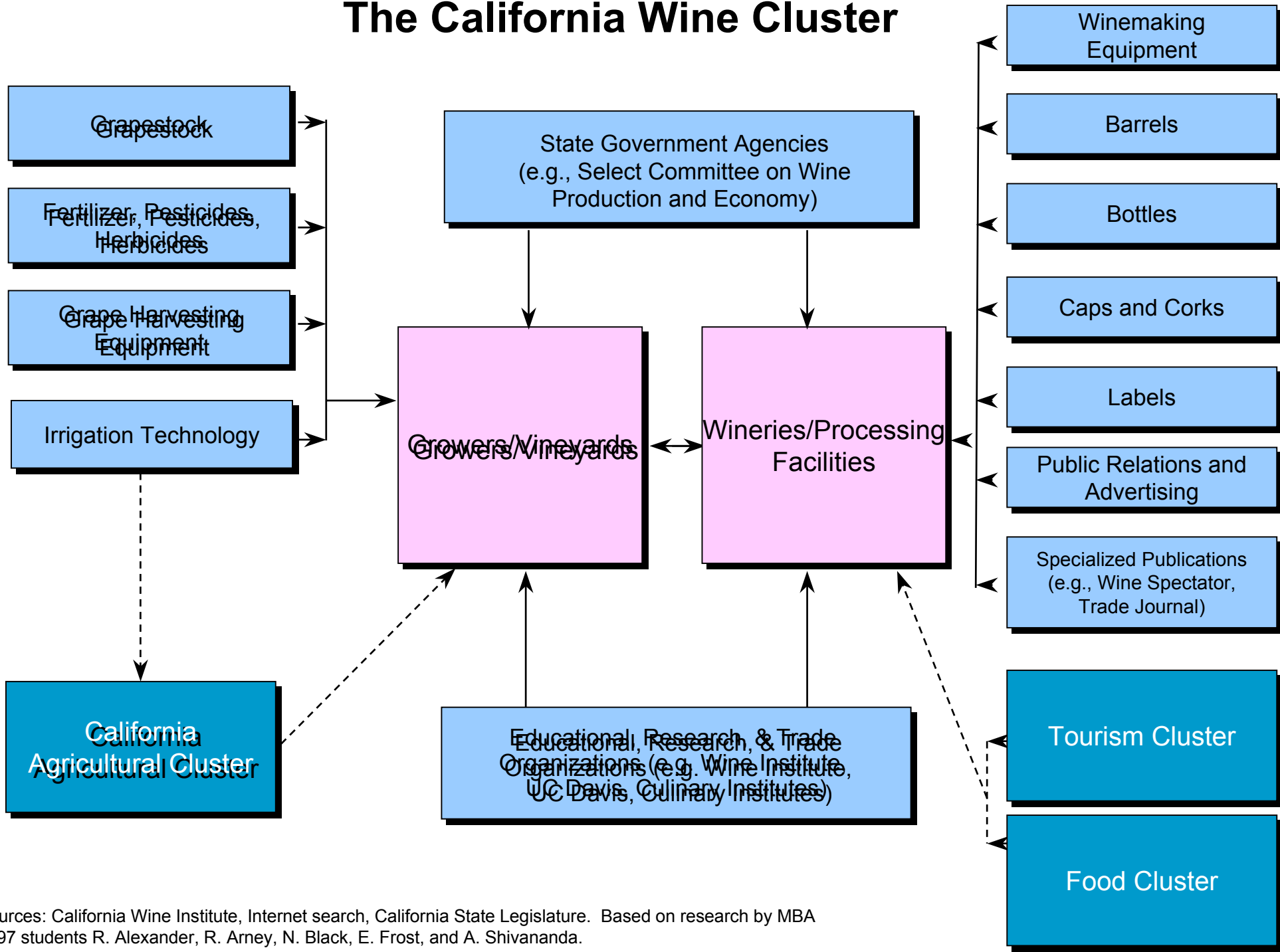
- A sound macroeconomic, political, legal, and social context creates the potential for competitiveness, **but is not sufficient**
- Competitiveness ultimately depends on improving the **microeconomic capability** of the economy and the **sophistication of local companies and local competition**

# Productivity, Innovation, and the Business Environment



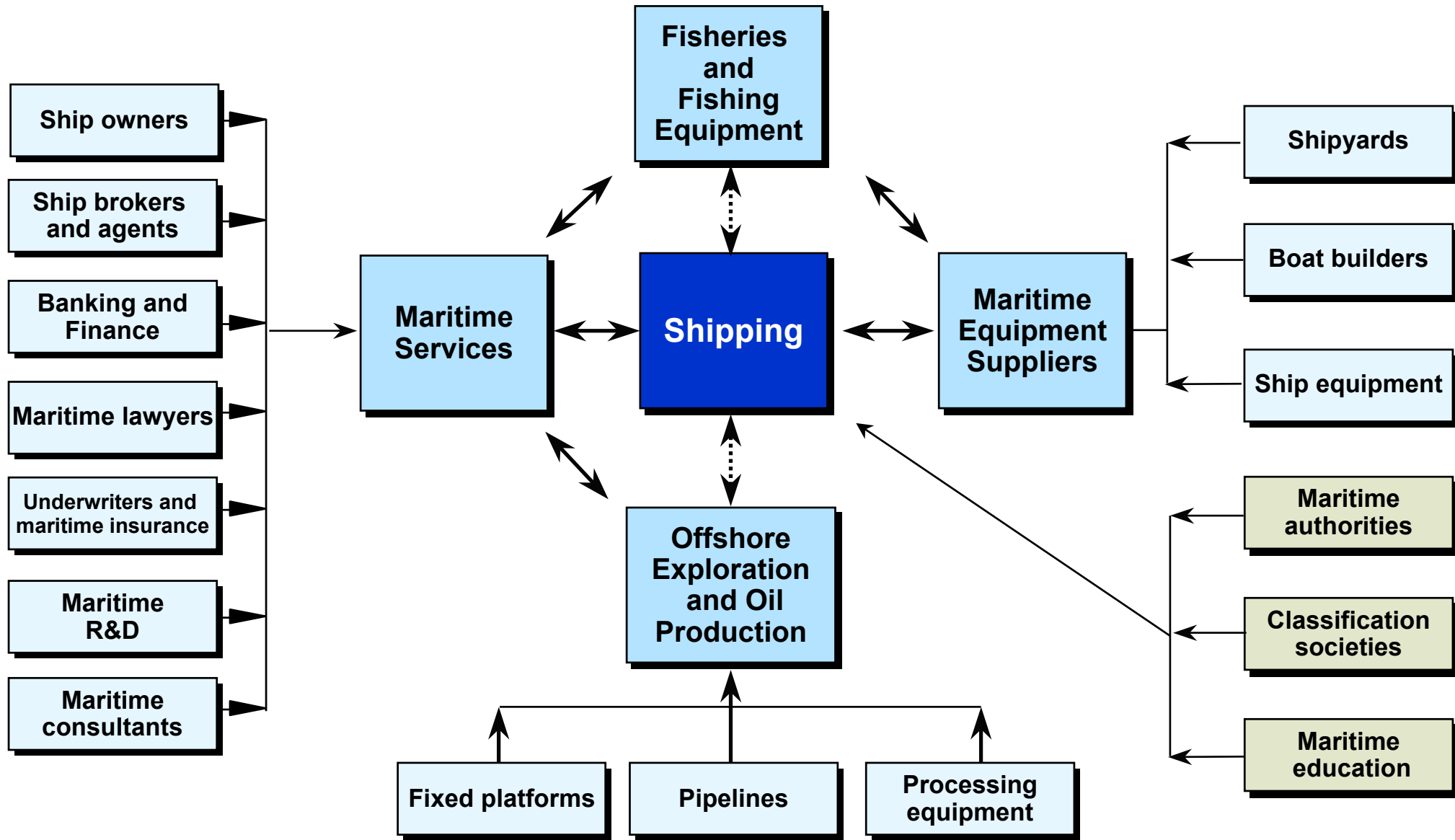
- Successful economic development is a process of **successive economic upgrading**, in which the business environment in a nation evolves to support and encourage increasingly sophisticated ways of competing

# 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.

# The Norwegian Maritime Cluster



Norway has 0.1% of the world's population, represents 1.0% of the world's economy, yet accounts for 10% of world seaborne transportation

# Clusters and Competitiveness

## Clusters increase productivity and efficiency

- Efficient **access** to specialized inputs, services, employees, information, institutions, and “public goods” (e.g. training programs)
- Ease of **coordination** and transactions across firms
- Rapid **diffusion** of best practices
- Ongoing, visible **performance comparisons** and strong incentives to improve vs. local rivals

## Clusters stimulate and enable innovation

- Enhanced ability to **perceive innovation opportunities**
- Presence of multiple suppliers and institutions to assist in **knowledge creation**
- Ease of **experimentation** given locally available resources

## Clusters facilitate commercialization

- Opportunities for **new companies** and **new lines of established business** are more apparent
- **Commercializing** new products and starting new companies is easier because of available skills, suppliers, etc.



Clusters reflect the fundamental influence of **externalities / linkages** across firms and associated institutions in competition

# Levels of Clusters

- There is often an **array of clusters** in a given field in different locations, 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

# Leading Footwear Clusters

## 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

## 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

## China

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

## Vietnam/Indonesia

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



# Institutions for Collaboration

## *General*

- Chambers of Commerce
- Professional associations
- School networks
- University partner groups
- Religious networks
- Joint private/public advisory councils
- Competitiveness councils

## *Cluster-specific*

- Industry associations
- Specialized professional associations and societies
- Alumni groups of core cluster companies
- Incubators

- Institutions for collaboration (IFC) are **formal and informal organizations** that
  - facilitate the exchange of information and technology
  - conduct joint activities
  - foster coordination among firms
- IFCs can improve the business environment by
  - creating **relationships** and level of trust that make them more effective
  - defining of **common standards**
  - conducting or facilitating the organization of **collective action** in areas such as procurement, information gathering, or international marketing
  - defining and communicating common **beliefs and attitudes**
  - providing mechanisms to develop a common economic or **cluster agenda**

# Institutions for Collaboration

## Selected Institutions for Collaboration, San Diego

### General

- San Diego Chamber of Commerce
- San Diego MIT Enterprise Forum
- Corporate Director's Forum
- San Diego Dialogue
- Service Corps of Retired Executives, San Diego
- San Diego Regional Economic Development Corporation
- Center for Applied Competitive Technologies
- San Diego World Trade Center
- UCSD Alumni
- San Diego Regional Technology Alliance
- San Diego Science and Technology Council
- Office of Trade and Business Development

### Cluster-Specific

#### Telecommunication

- Linkabit Alumni

#### Biotech

- Hybritech Alumni
- Scripps Research Institute Alumni
- BIOCOMM
- UCSD Connect

# Stages Of Competitive Development



Source: Porter, Michael E., *The Competitive Advantage of Nations*,  
The Free Press: New York (1990)

# U.A.E. Competitiveness Agenda

- **Upgrade the business environment**
  - Foster cluster development
  - Develop an economic strategy at the emirate level
  - Create a regional strategy for the Gulf states
  - Shift the roles of government and the private sector in economic policy

# U.A.E. Economic Policy Initiatives

- Oct 2000: Opening of “Dubai Internet City”, a new **free export zone** developed with a \$250m investment
  - The Jebel Ali Free Zone established in 1985 has been a key element of the economic transformation of the U.A.E.; it now hosts 2,200 companies
- Nov 2000: Opening of the Abu Dhabi **Security Markets** and the Dubai Financial Markets **Stock Exchange**

# Export Processing Zones and Competitiveness

- Export processing zones are more successful if they are targeted around the needs of specific **clusters**
  - Use a cluster-based approach to FDI promotion
  - Involve companies already present in the zone to attract further specialized suppliers and service providers
- Export processing zones can improve a country's competitiveness if they **trigger economy-wide changes** in the business environment
  - Creation of specialized input factors, such as specialized suppliers and research facilities
  - Upgrading of rules and regulations, for example in the labor market
  - Improvement of government services, for example in customs services

# U.A.E. Competitiveness Agenda

- Upgrade the business environment

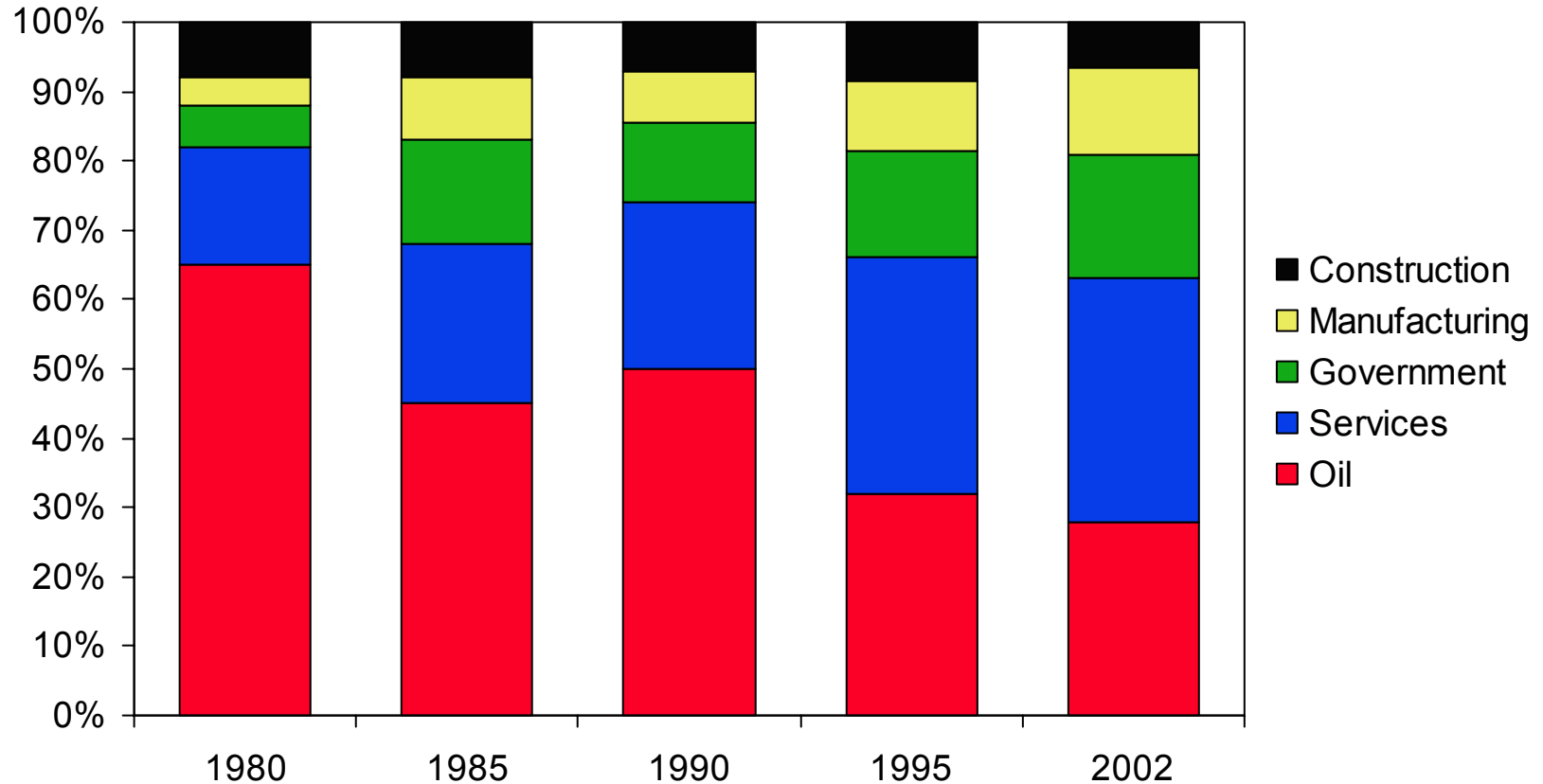
- **Foster cluster development**

- Develop an economic strategy at the emirate level
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# Composition of the U.A.E. Economy

## Change over Time

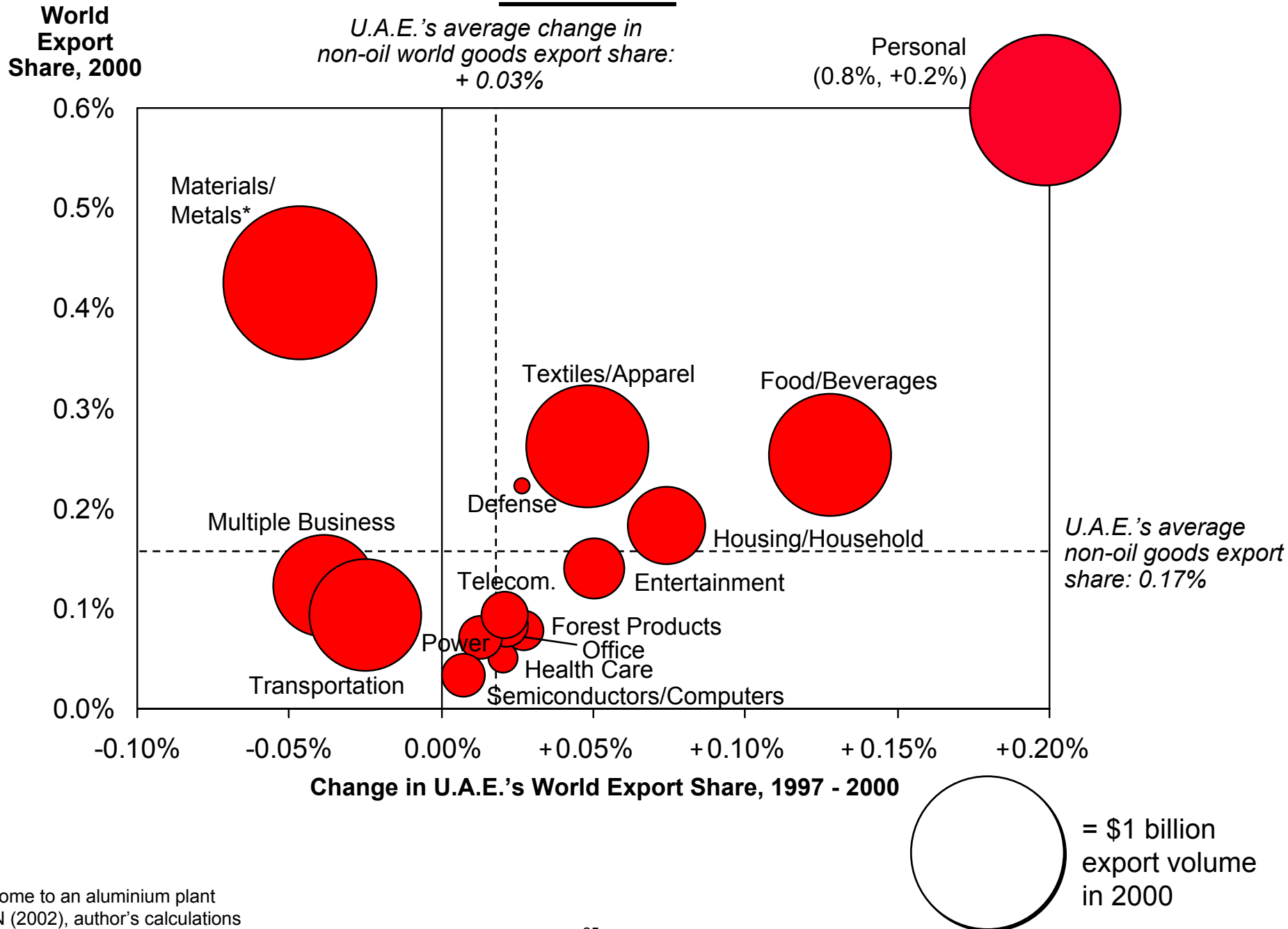
Share of GDP



- Over the last twenty years, the U.A.E. has **reduced** its dependence on the oil sector significantly



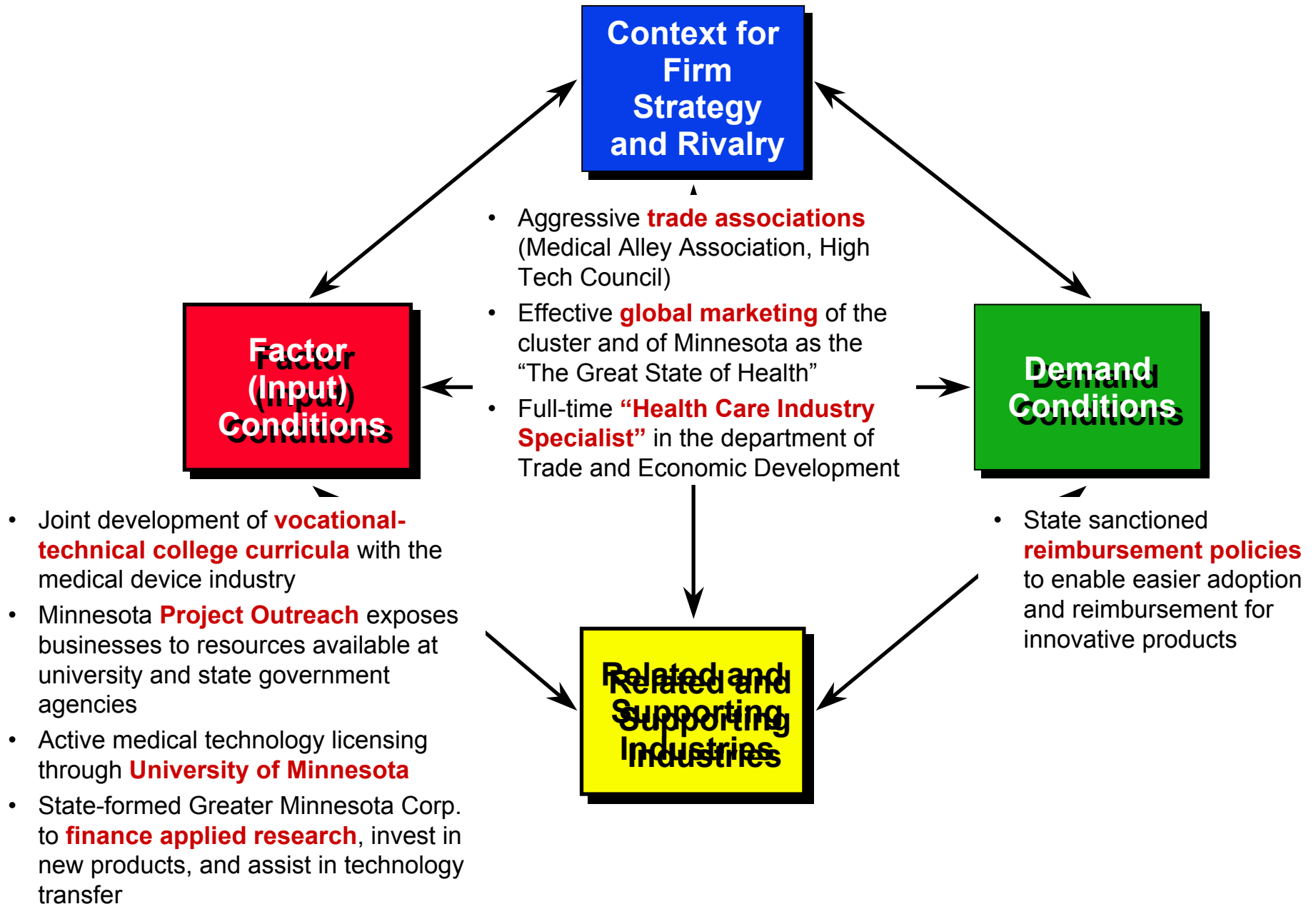
# U.A.E. Non-Oil Export Performance By Broad Sector 1997-2000



\*Dubai is home to an aluminium plant  
Source: UN (2002), author's calculations  
CAON Dubai UAE 2003 05-07-03 CK.ppt

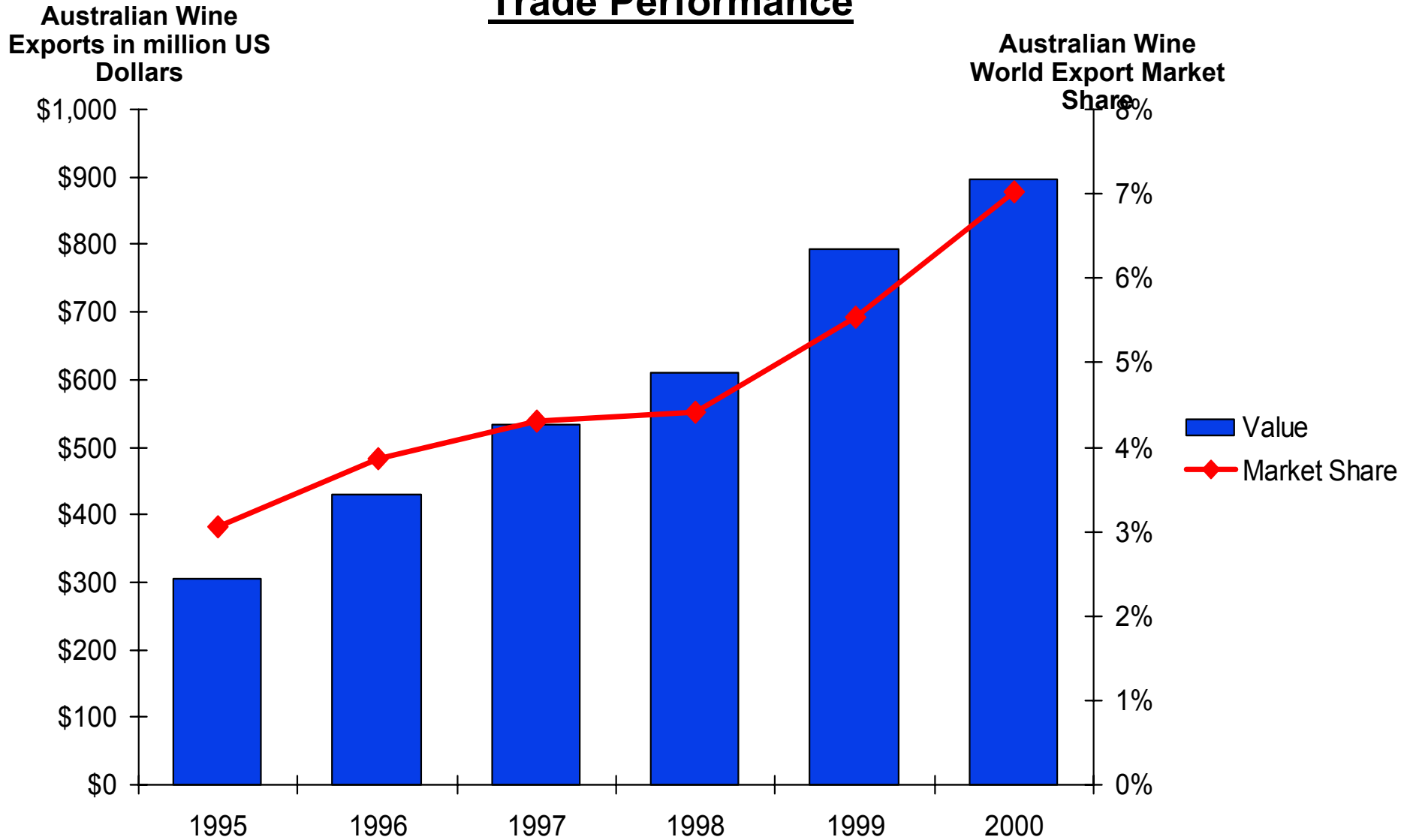
# Public / Private Cooperation in Cluster Upgrading

## Minnesota's Medical Device Cluster



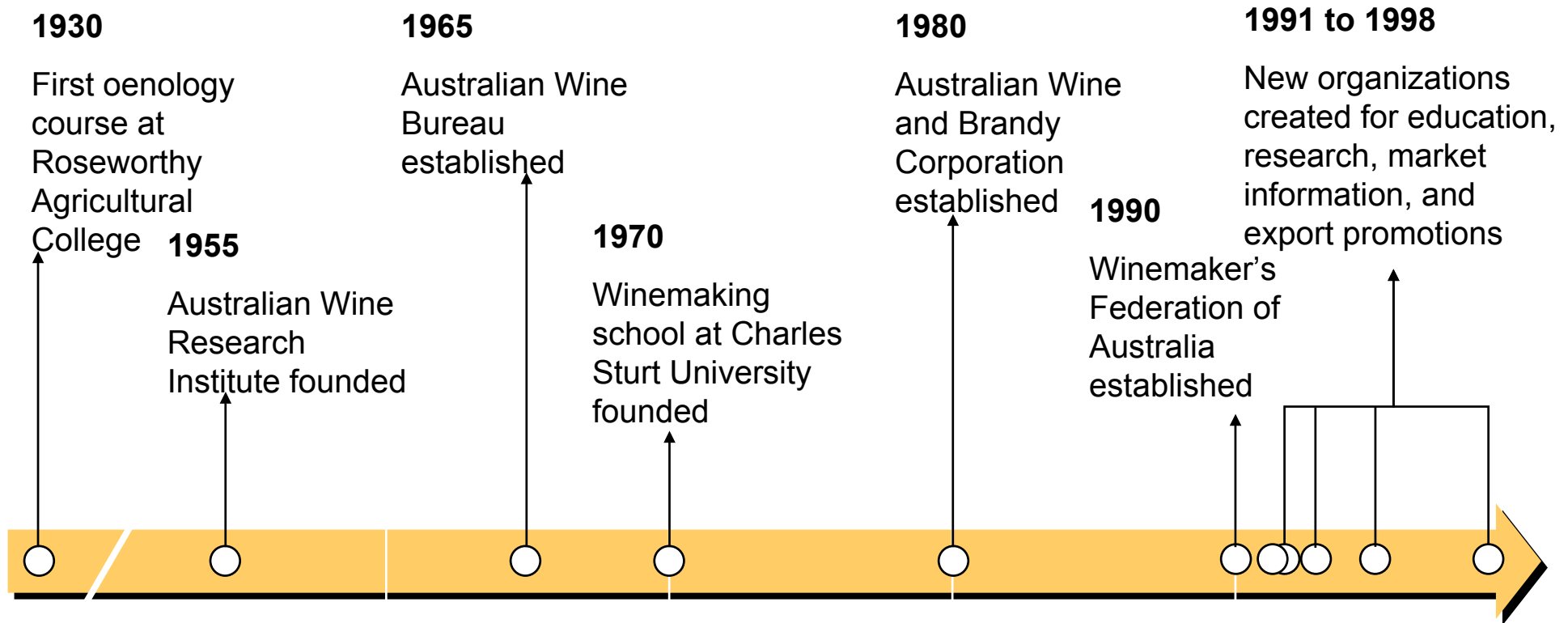
# The Australian Wine Cluster

## Trade Performance



Source: UN Trade Statistics

# The Australian Wine Cluster History



**1950s**

*Import of European winery technology*

**1960s**

*Recruiting of experienced foreign investors, e.g. Wolf Bass*

**1970s**

*Continued inflow of foreign capital and management*

**1980s**

*Creation of large number of new wineries*

**1990s**

*Surge in exports and international acquisitions*

# The Australian Wine Cluster

## Recently Founded Institutions for Collaboration

### Winemakers' Federation of Australia

- Established in 1990
- Focus: Public policy representation of companies in the wine cluster
- Funding: Member companies

### Cooperative Centre for Viticulture

- Established in 1991
- Focus: Coordination of research and education policy in viticulture
- Funding: other cluster organizations

### Australian Wine Export Council

- Established in 1992
- Focus: Wine export promotion through international offices in London and San Francisco
- Funding: Government; cluster organizations

### Grape and Wine R&D Corporation

- Established in 1991 as statutory body
- Focus: Funding of research and development activities
- Funding: Government; statutory levy

### Wine Industry Information Service

- Established in 1998
- Focus: Information collection, organization, and dissemination
- Funding: Cluster organizations

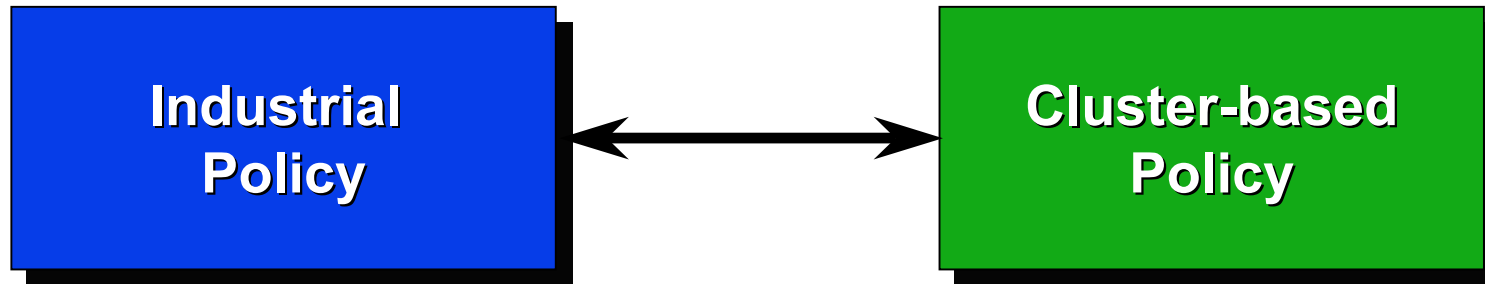
### Wine Industry National Education and Training Council

- Established in 1995
- Focus: Coordination, integration, and standard maintenance for vocational training and education
- Funding: Government; other cluster organizations

# Appropriate Roles of Government in Cluster Development

- A successful cluster policy builds on **sound overall economic policies**
- Government should support the development of **all clusters**, not choose among them
- Government policy should **reinforce established and emerging clusters** rather than attempt to create entirely new ones
- Government's role in cluster initiatives is as **facilitator** and **participant**. The most successful cluster initiatives are a public-private partnership

# Cluster Policy versus Industrial Policy



- Target desirable industries / sectors
- Focus on domestic companies
- Intervene in competition (e.g., protection, industry promotion, subsidies)
- Centralizes decisions at the national level



**Distort competition**

- **All** clusters can contribute to prosperity
- Domestic and foreign companies both enhance productivity
- Relax impediments and constraints to productivity
- Emphasize cross-industry linkages / complementarities
- Encourage initiative at the state and local level



**Enhance competition**

# U.A.E. Competitiveness Agenda

- Upgrade the business environment
- Foster cluster development

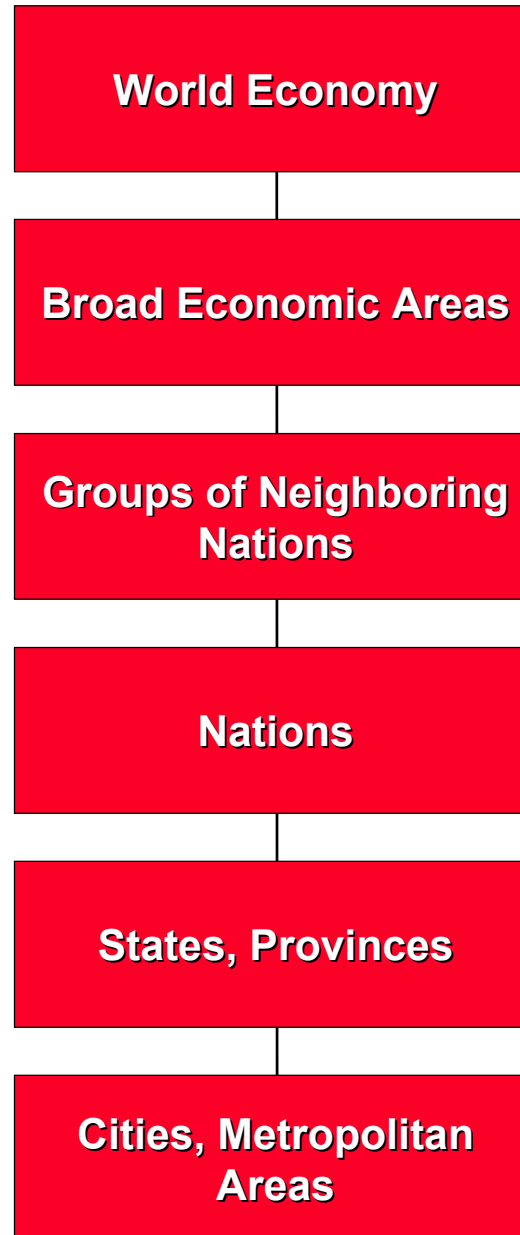
- **Develop an economic strategy at the emirate level**

- Create a regional strategy for the Gulf states
- Shift the roles of government and the private sector in economic policy



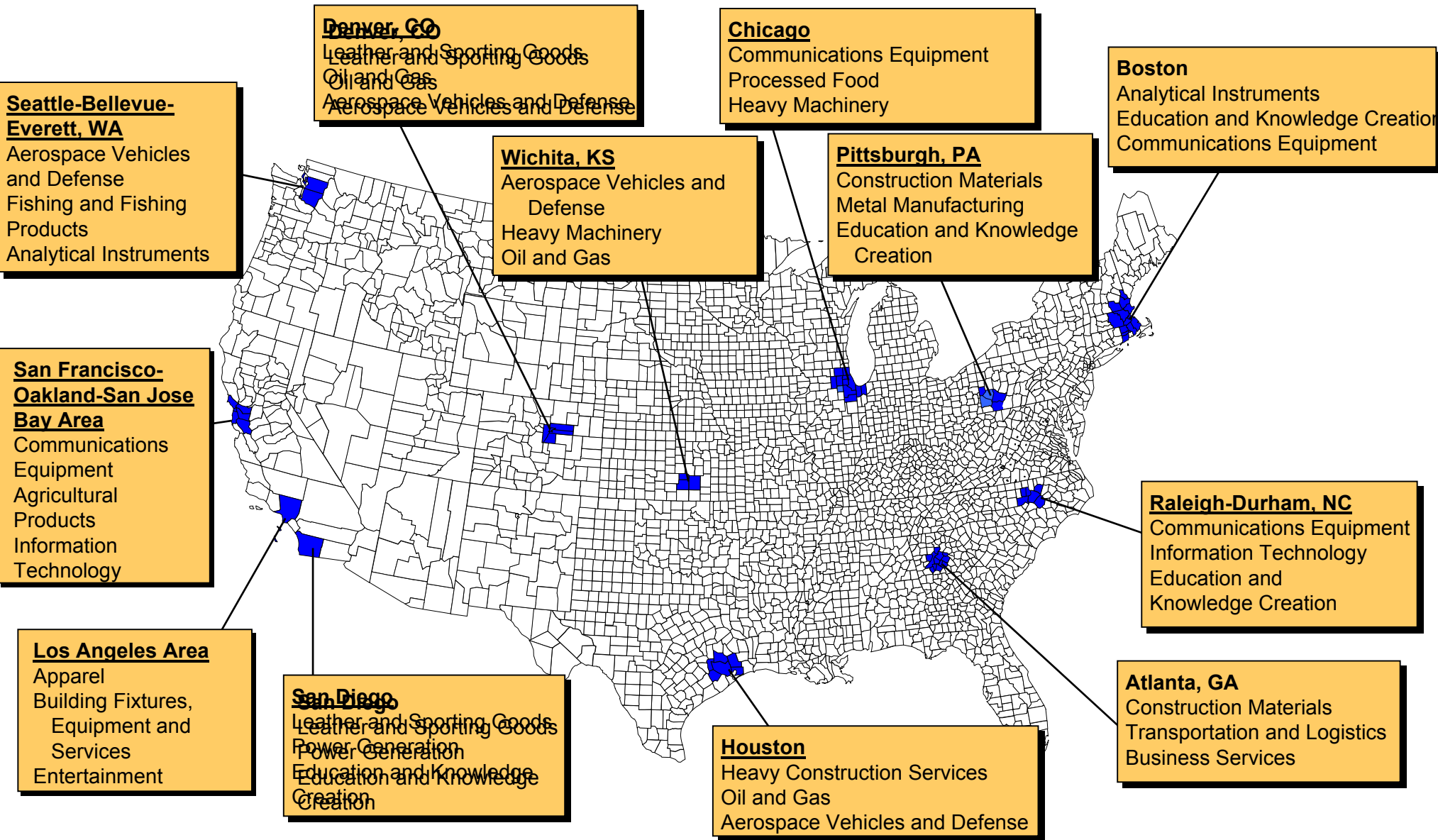
# **Influences on Competitiveness**

## **Multiple Geographic Levels**



# Specialization of Regional Economies

## Select U.S. Geographic Areas

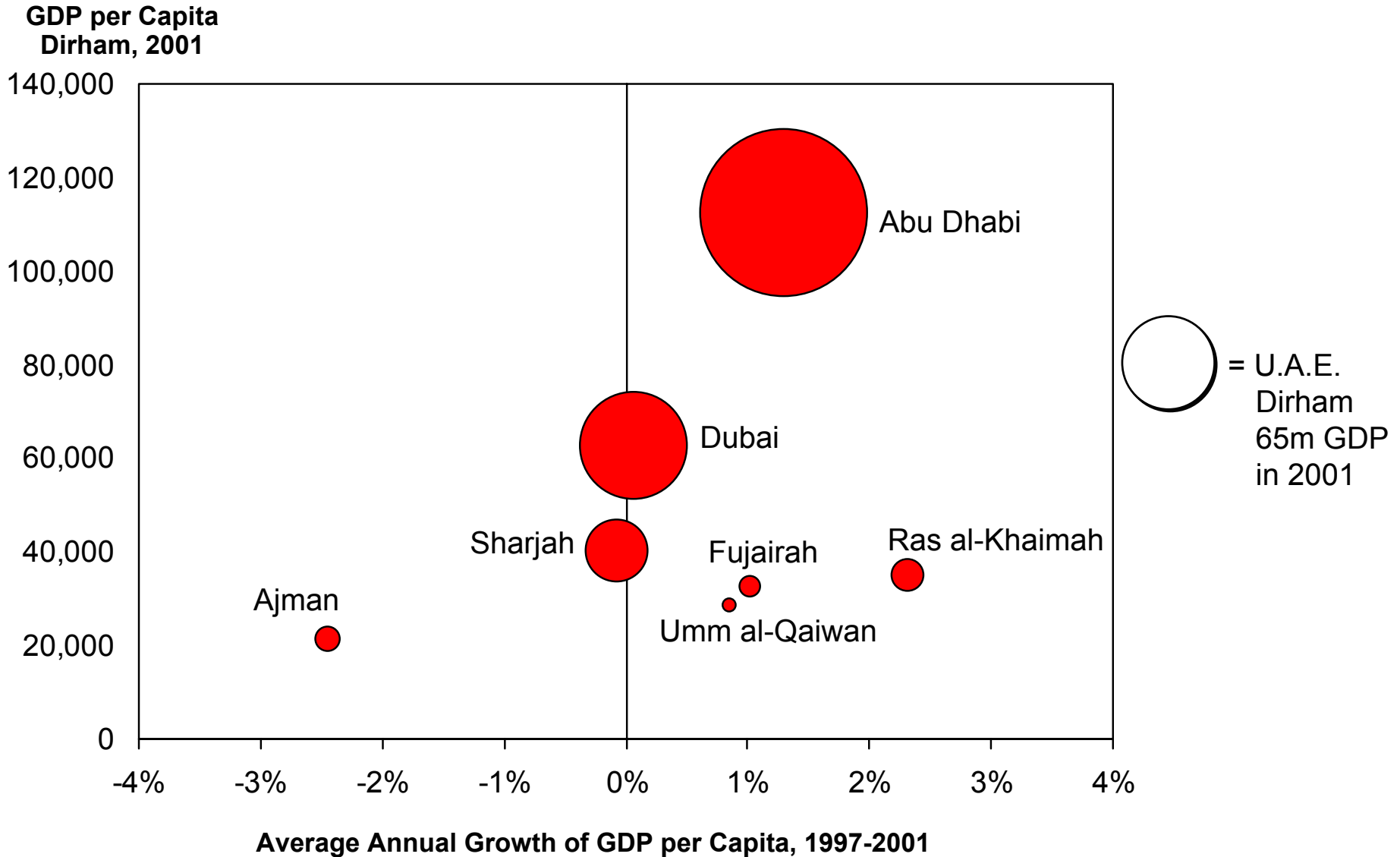


Note: Clusters listed are the three highest ranking clusters in terms of share of national employment

Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

# Comparative Economic Performance

## Emirates of the U.A.E.



# U.A.E. Competitiveness Agenda

- Upgrade the business environment
- Foster cluster development
- Develop an economic strategy at the emirate level

- **Create a regional strategy for the Gulf states**

- Shift the roles of government and the private sector in economic policy

# Cross-National Regions and Economic Strategy

## Traditional Views

- Regions as **free trade zones**; regions as **economic unions** (e.g., United States, European Union)

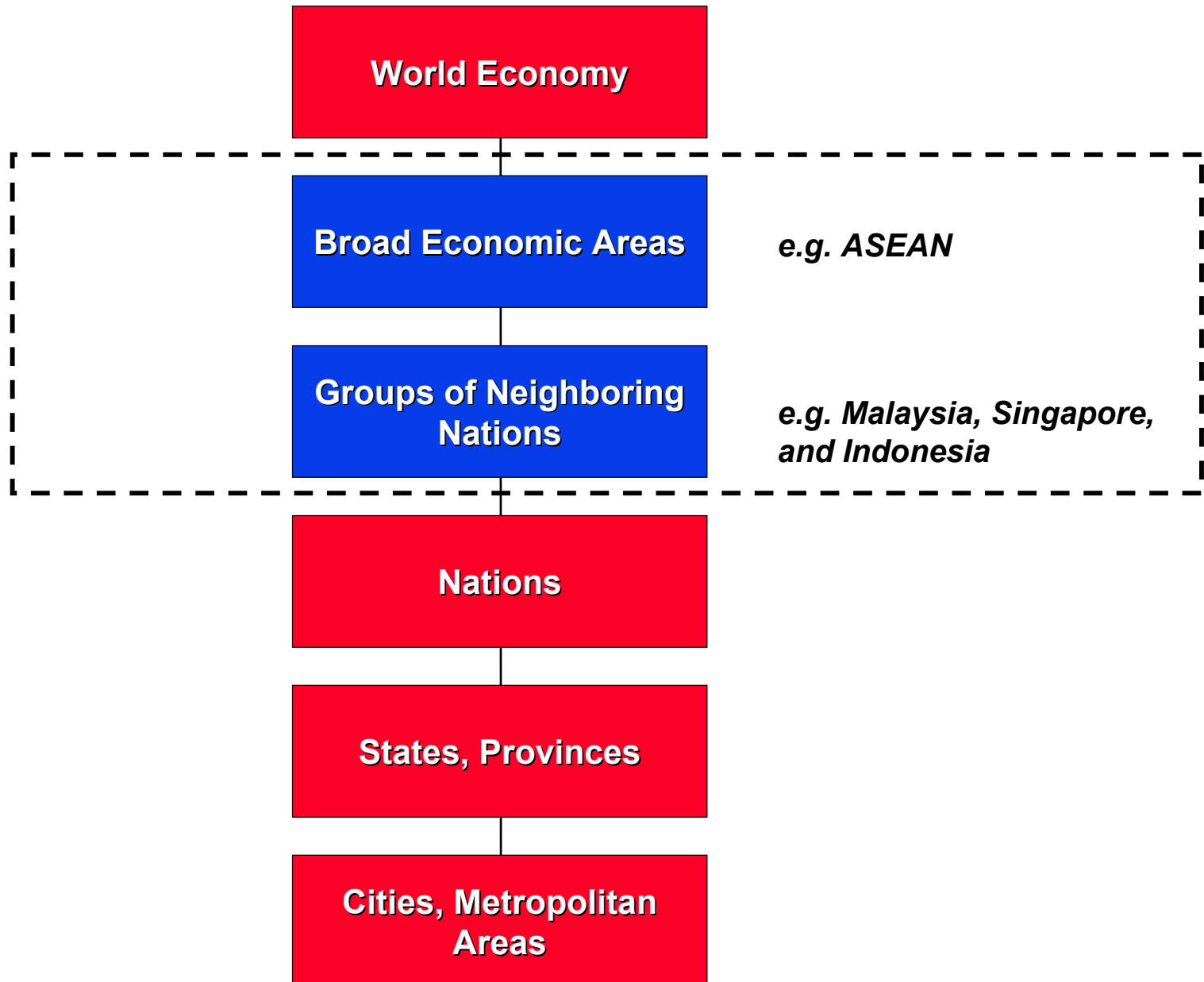


## New View

- A regional strategy as a powerful tool to enhance **competitiveness** in autonomous countries
- Internal trade and investment
  - Gains from internal trade and investment
- AND
- Company operations and strategy
  - Enhancing the **competitive capability** of firms
  - Expanding trade in **non-traditional** export industries
- Business environment
  - Mutual benefits to the **productivity of the business environment** through policy coordination that captures **external economies** and the benefits of **specialization** in institutions and infrastructure across borders
- Cluster development
  - **Cross-border cluster** specialization and integration
- Foreign investment
  - Enhancing interest and investment in the region by the **international community**
- Economic policy process
  - Improving economic policy formulation and implementation **at the national level**

# Cross-National Economic Coordination

## Alternate Geographic Levels



# Cross-National Economic Coordination

## Illustrative Policy Areas

### Factor (Input) Conditions

- Improve regional **transportation infrastructure**
- Create an efficient **energy** network
- Upgrade/link regional **communications**
- Upgrade/link **financial markets**
- Upgrade **higher education** through facilitating specialization and student exchanges
- Expand cross-border business and financial **information access and sharing**
- Coordinate activities to ensure **personal safety**

### Context for Strategy and Rivalry

- Coordinate **macroeconomic** policies
- Eliminate **trade and investment barriers** within the region
- Simplify **cross-border** regulations and paperwork
- Guarantee minimum basic **investor protections**
- Agree on foreign **investment promotion guidelines** to limit forms of investment promotion that do not enhance productivity
- Coordinated **competition policy**

### Demand Conditions

- Set minimum **environmental standards**
- Set minimum **safety standards**
- Establish reciprocal **consumer protection laws**

### Related and Supporting Industries

- Establish ongoing upgrading process in **clusters that cross national borders**, e.g.
  - Tourism
  - Agribusiness
  - Textiles and Apparel
  - Information Technology

### Regional Governance

- Share **best practices** in government operations
- Improve regional **institutions**
  - Regional development bank
  - Dispute resolution mechanisms
  - Policy coordination body
- Develop a regional **marketing strategy**

# U.A.E. Competitiveness Agenda

- Upgrade the business environment
- Foster cluster development
- Develop an economic strategy at the emirate level
- Create a regional strategy for the Gulf states

- **Shift the roles of government and the private sector in economic policy**



# Shifting Responsibilities for Economic Development

## Old Model

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



## New Model

- Economic development is a **collaborative process** involving government at multiple levels, companies, teaching and research institutions, and institutions for collaboration

# Roles of Government in Economic Development

- **Macroeconomic, political, legal, and social context**
  - Establish a **stable and predictable** macroeconomic, legal, and political environment
  - Improve the **social conditions** of citizens
- **General microeconomic business environment**
  - Improve the availability, quality, and efficiency of **cross-cutting or general purpose inputs, infrastructure, and institutions**
  - Set **overall rules and incentives** governing competition that encourage productivity growth
- **Clusters**
  - Facilitate **cluster development and upgrading**
- **Process of Economic Change**
  - Create institutions and **processes for upgrading competitiveness** that inform citizens and mobilize the private sector, government at all levels, educational and other institutions, and civil society to take action

# Role of the Private Sector in Economic Development

- A company's competitive advantage is partly the result of the **local environment**
- Company membership in a cluster offers **collective benefits**
- Private investment in **“public goods”** is justified



- Take an **active role** in upgrading the local infrastructure
- Nurture **local suppliers** and attract new supplier investments
- Work closely with local **educational and research institutions** to upgrade **quality and create specialized programs addressing cluster needs**
- Provide government with **information** and **substantive input** on regulatory issues and constraints bearing on cluster development
- Focus **corporate philanthropy** on enhancing the local business environment



- An important role for **trade associations**
  - Greater influence
  - Cost sharing

# Selected References

- The Competitive Advantage of Nations, New York: The Free Press, 1990
- “Clusters and the New Competitive Agenda for Companies and Governments” in On Competition, Boston: Harvard Business School Press, 1998
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- “Attitudes, Values, Beliefs and the Microeconomics of Prosperity,” in Culture Matters: How Values Shape Human Progress, (L.E. Harrison, S.P. Huntington, eds.), New York: Basic Books, 2000

## Web resources

- Institute for Strategy and Competitiveness [www.isc.hbs.edu](http://www.isc.hbs.edu)
- ISC Cluster Mapping Data (US) [data.isc.hbs.edu/isc/index.jsp](http://data.isc.hbs.edu/isc/index.jsp)
- *Cluster of Innovation Initiative*
  - Council on Competitiveness [www.compete.org](http://www.compete.org)
  - Monitor Company [www.monitor.com](http://www.monitor.com)