

The Microeconomics of Development

Professor Michael E. Porter
Harvard Business School

*Andean Competitiveness Project
Caracas, Venezuela
June 21, 2001*

This presentation draws on ideas from Professor Porter's articles and books, in particular, The Competitive Advantage of Nations (The Free Press, 1990), "The Microeconomic Foundations of Economic Development," in The Global Competitiveness Report 1998, (World Economic Forum, 1998), "Clusters and the New Competitive Agenda for Companies and Governments" in On Competition (Harvard Business School Press, 1998) and ongoing statistical study of clusters, Competing for Prosperity: The Microeconomic Foundations of Development, forthcoming, and "What is Strategy?" (Harvard Business Review, Nov/Dec 1996). 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.

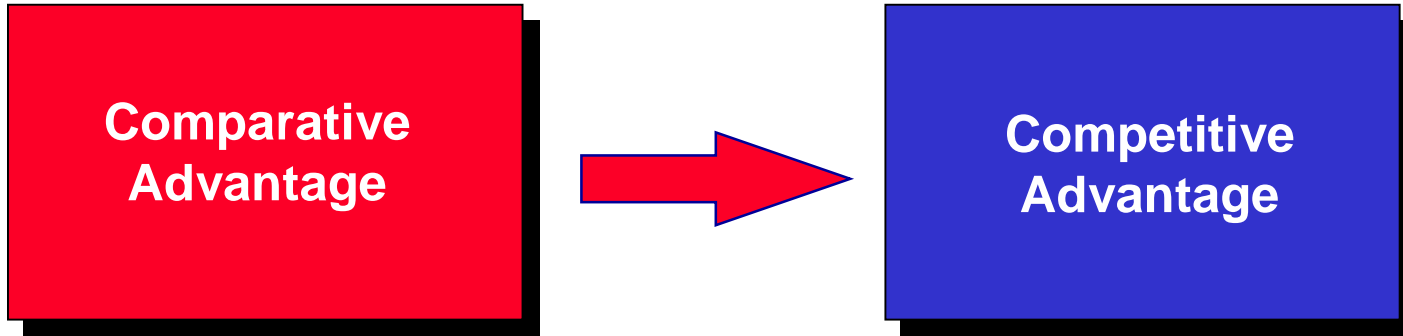
Sources of Rising Prosperity

- 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”, rather it reveals a **lack of fundamental competitiveness**



- 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

Changing Sources of Prosperity



**Wealth is set by
endowments**



Resource trap

**Wealth is created by a
nation's policy and
competition choices**

Determinants of Productivity and Productivity Growth

Macroeconomic, Political, and Legal Context for Development

Microeconomic Foundations of Development

Sophistication
of Company
Operations and
Strategy

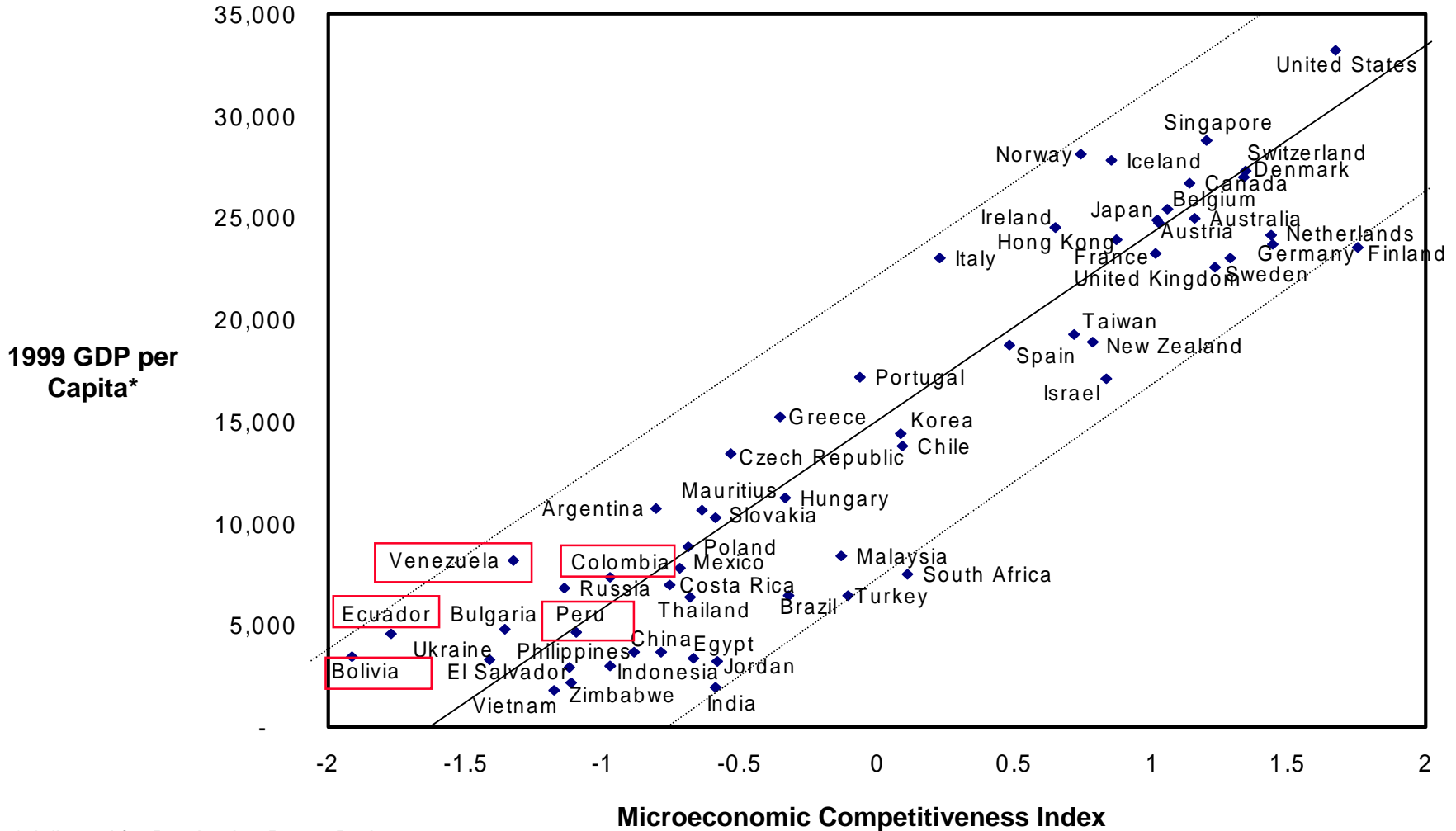


Quality of the
Microeconomic
Business
Environment

- Sound macroeconomic policies and a stable political / legal context are **necessary** to ensure a prosperous economy, **but not sufficient**
- Competitiveness ultimately depends on improving the **microeconomic foundations** of competition

Global Competitiveness Report 2000

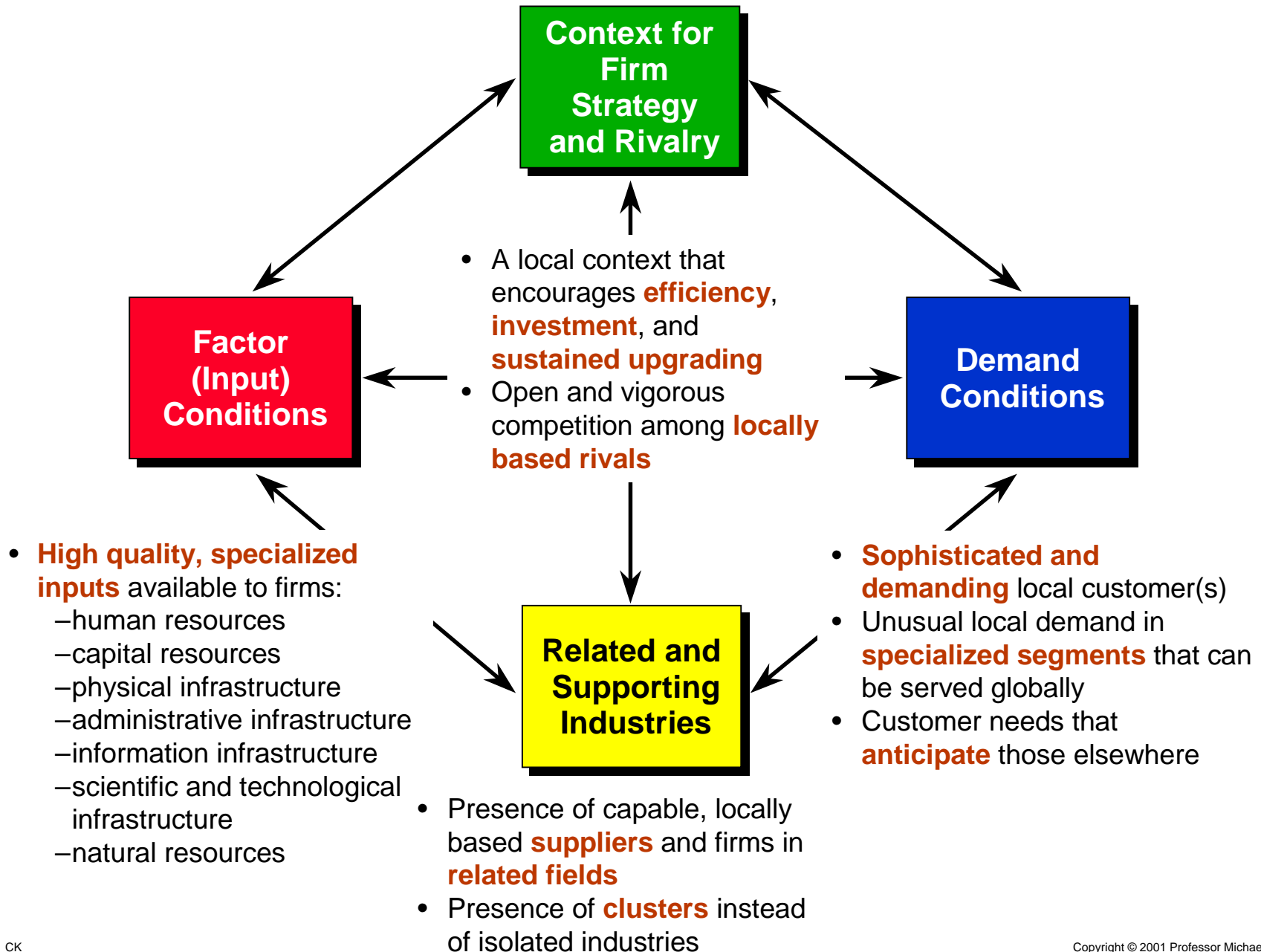
The Relationship Between Microeconomic Competitiveness and GDP Per Capita



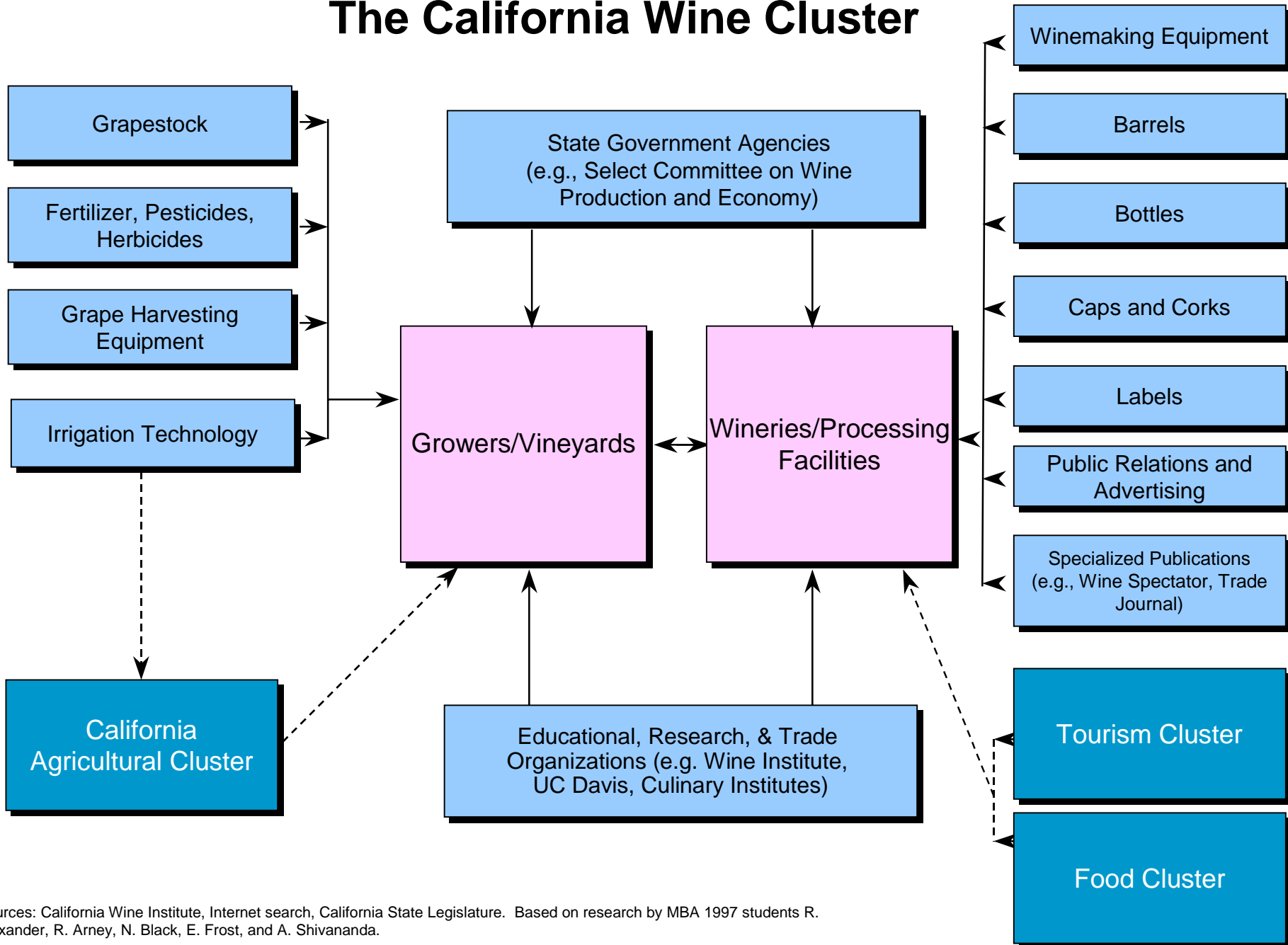
* Adjusted for Purchasing Power Parity

Source: Porter, Michael E. "The Current Competitiveness Index: Measuring the Microeconomic Foundations of Prosperity." *The Global Competitiveness Report 2000*, New York: Oxford University Press, 2000

Productivity and the Microeconomic Business Environment

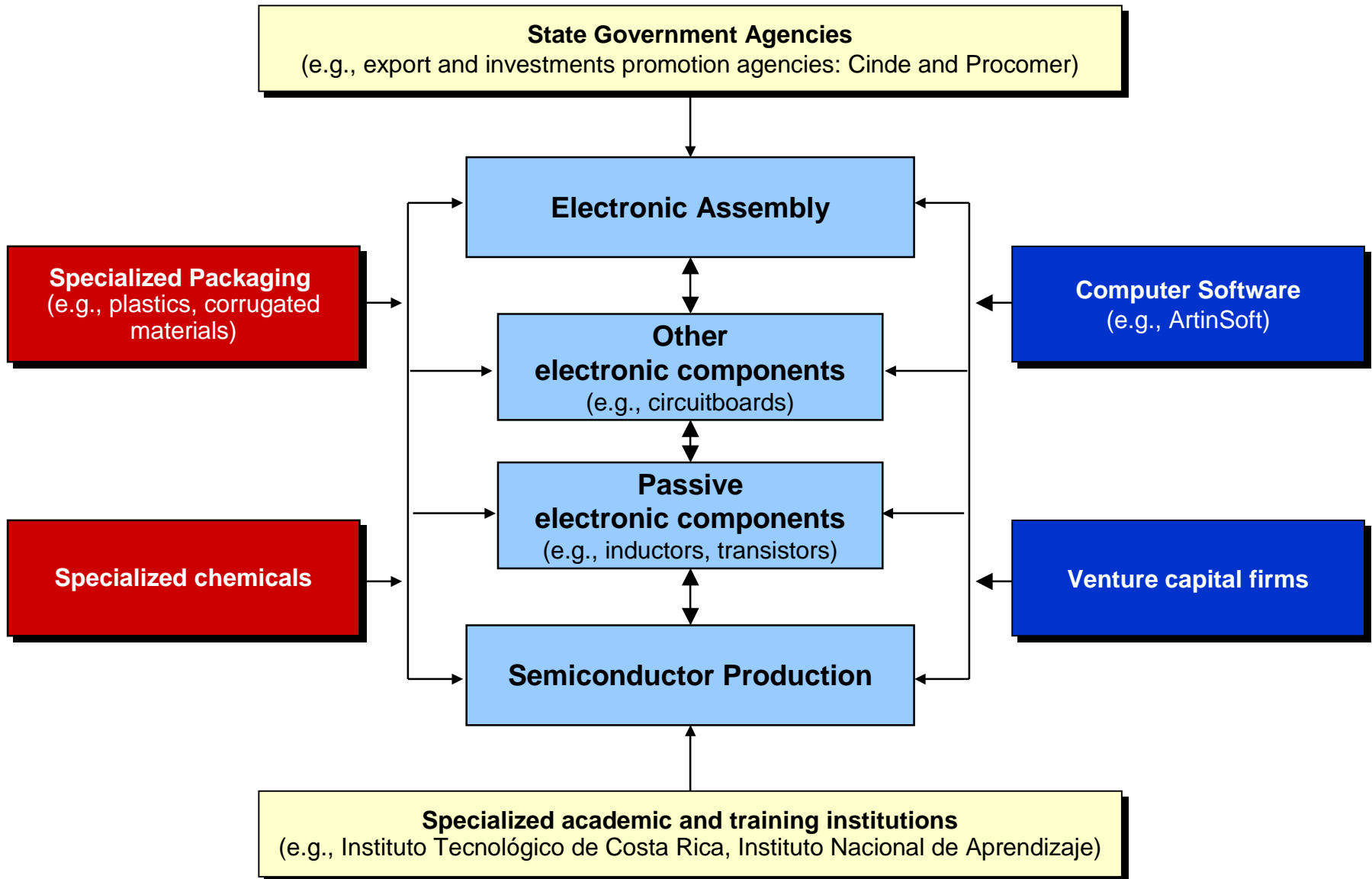


The California Wine Cluster

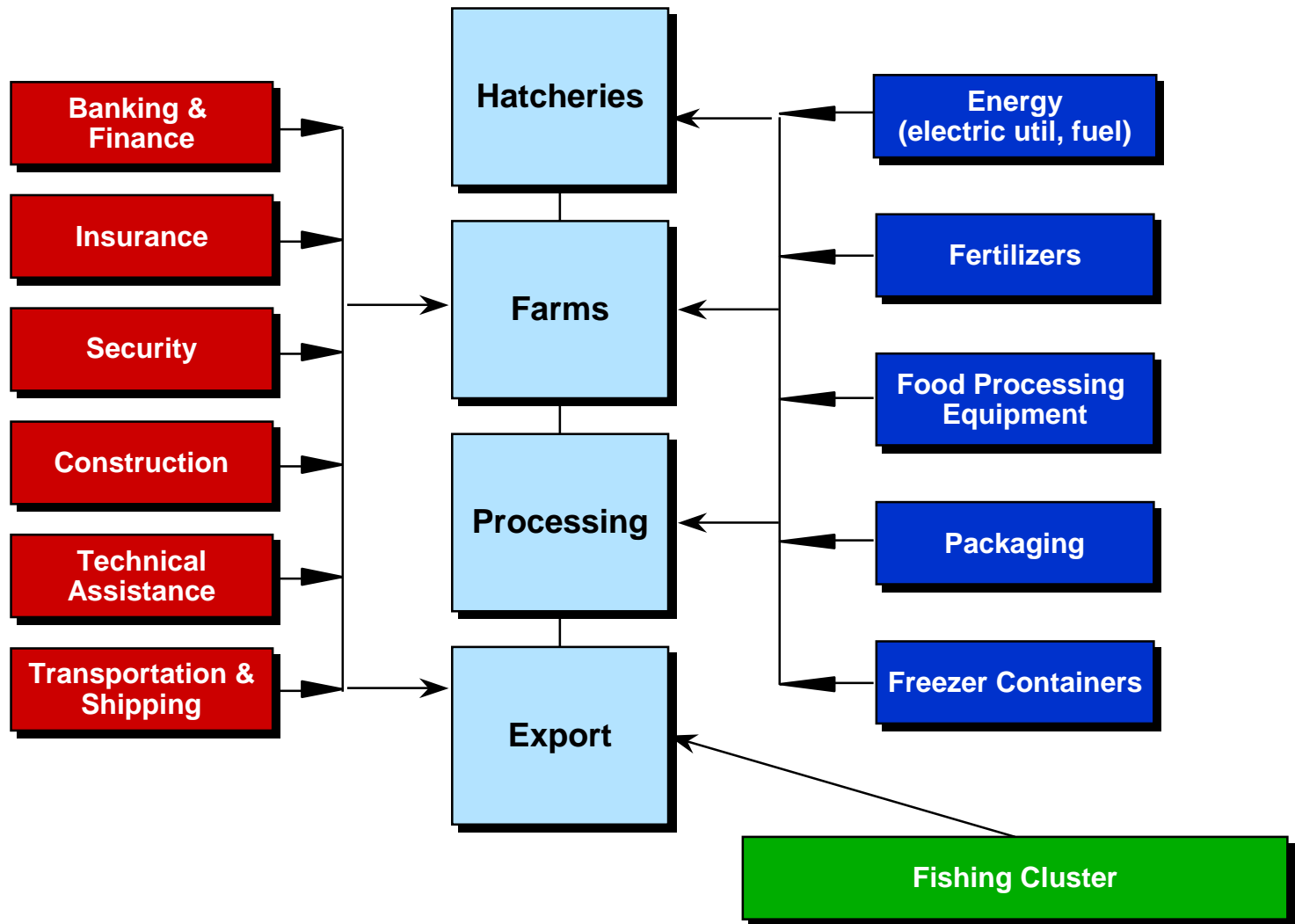


Sources: California Wine Institute, Internet search, California State Legislature. Based on research by MBA 1997 students R. Alexander, R. Arney, N. Black, E. Frost, and A. Shivananda.

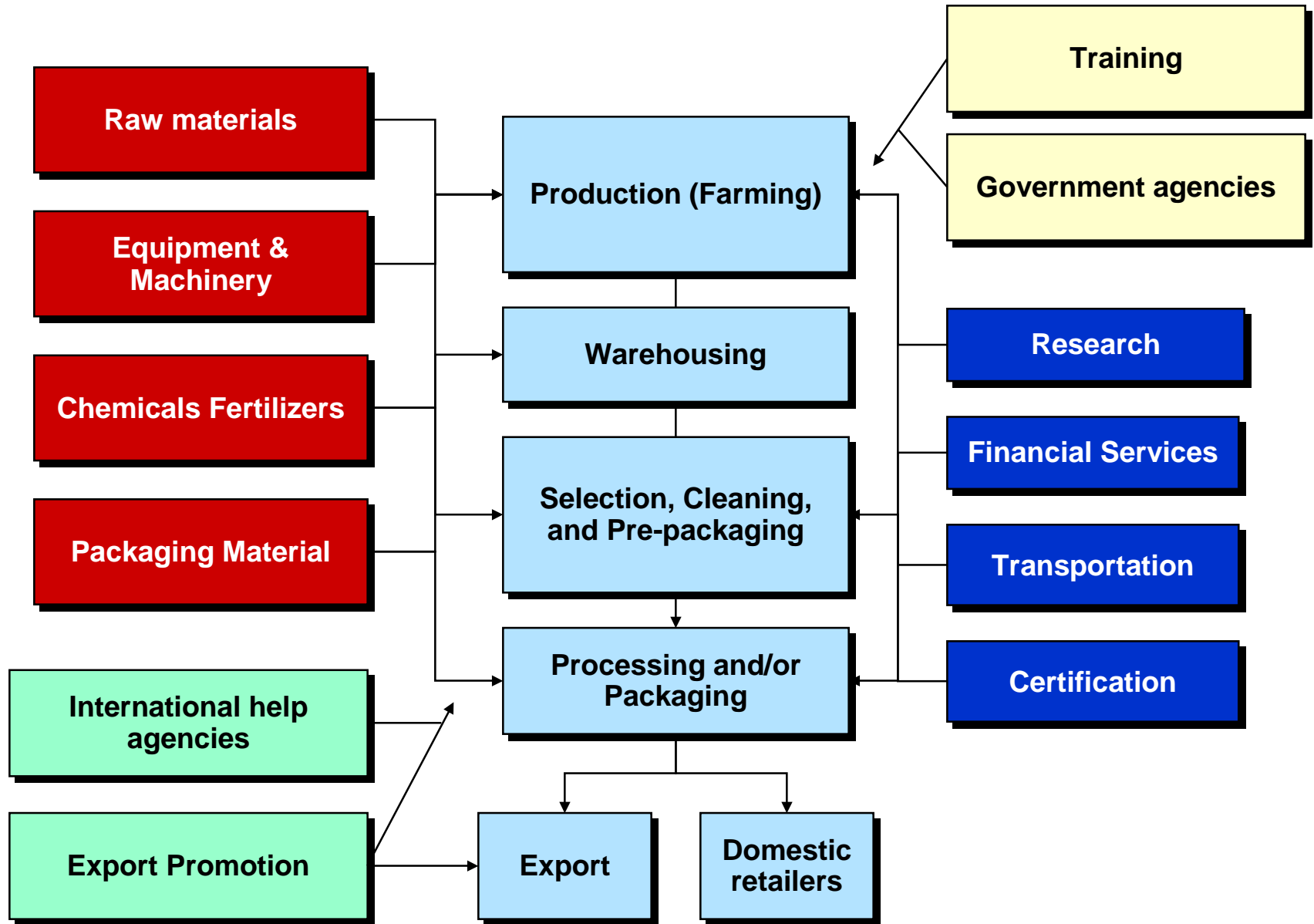
The Costa Rica Information Technology Cluster



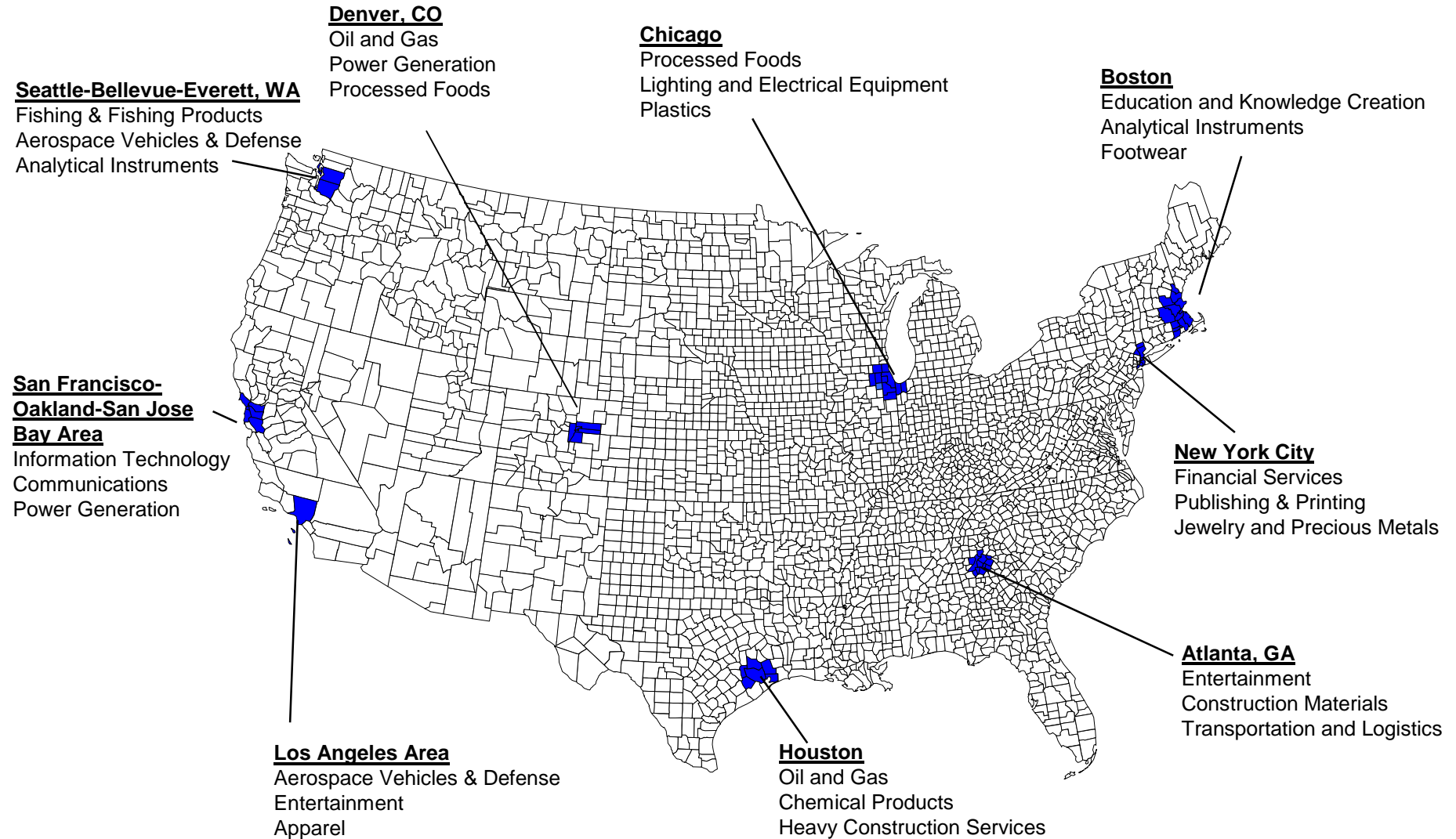
The Ecuadorian Shrimp Farming Cluster



The Bolivian Quinoa Cluster

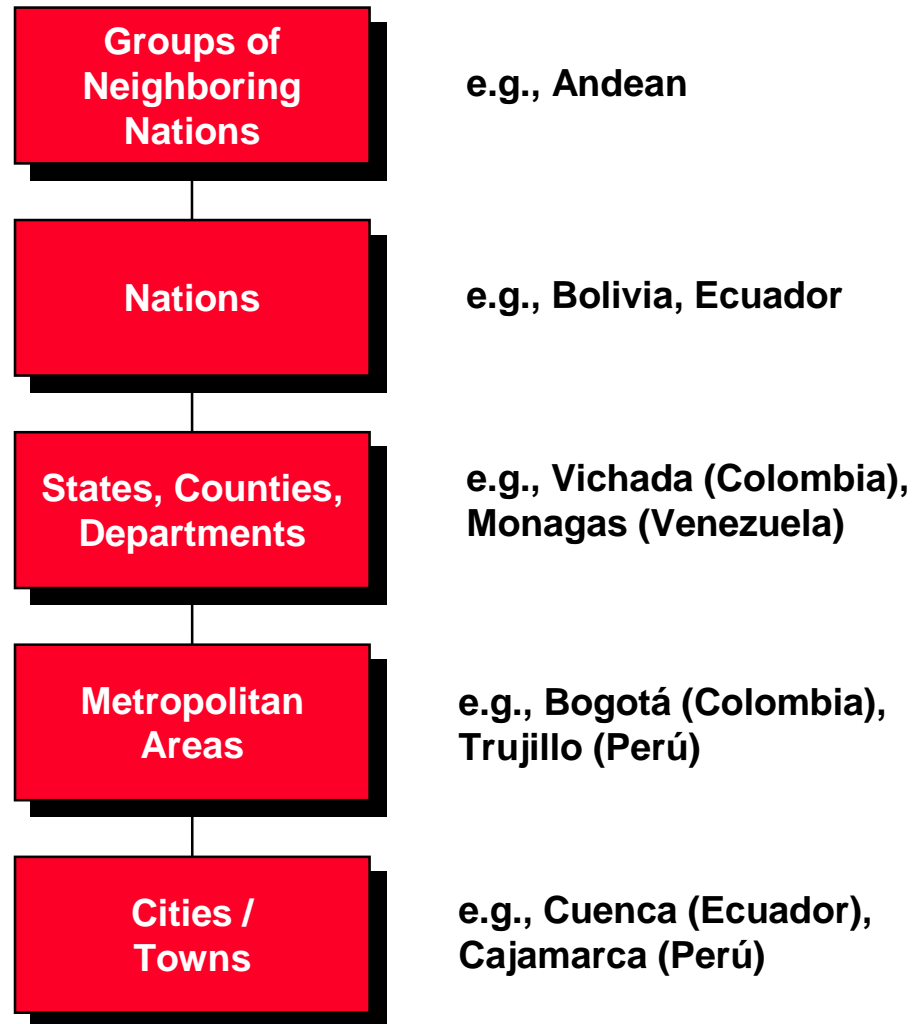


Regional Clusters in Selected U.S. Metropolitan Area



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

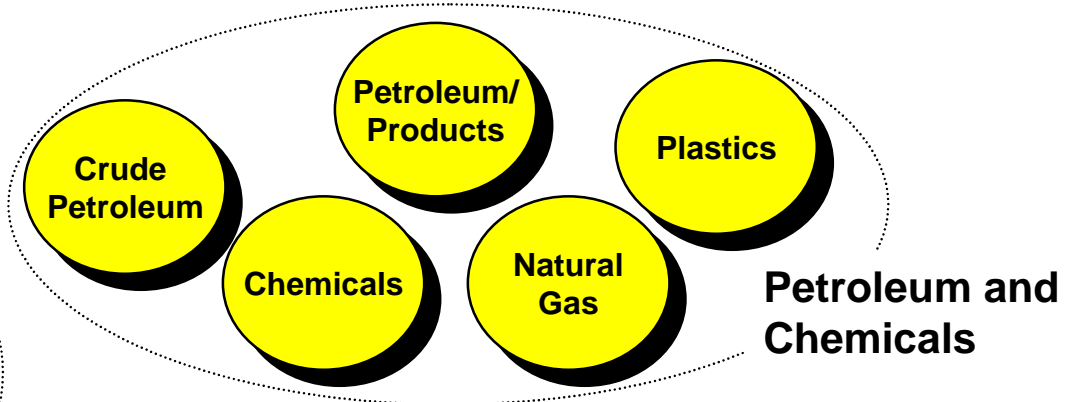
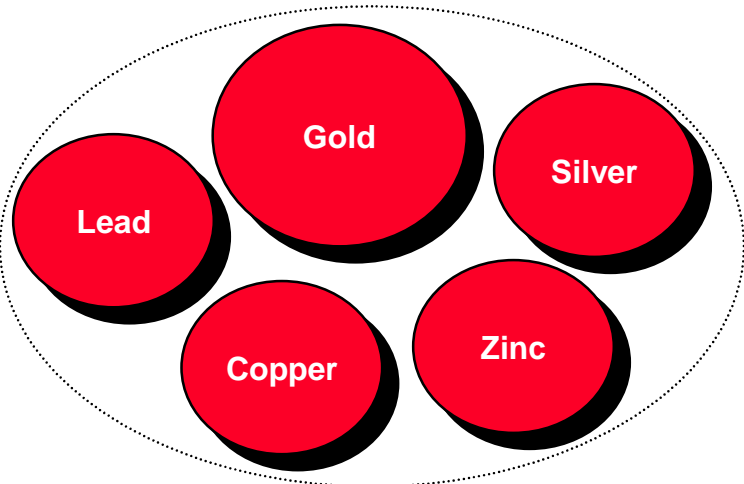
Geographic Levels and Competitiveness



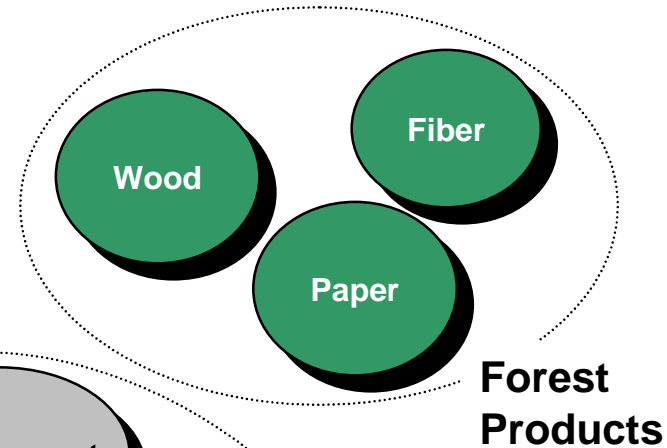
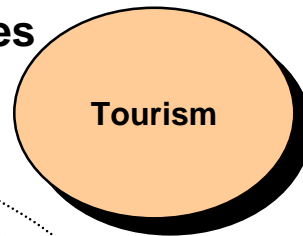
Clusters in Andean Countries

Example: Peru

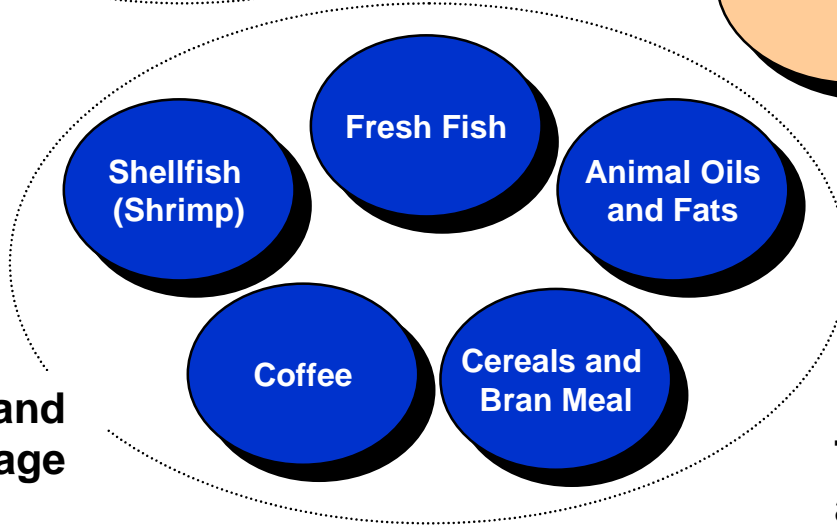
Materials and Metals



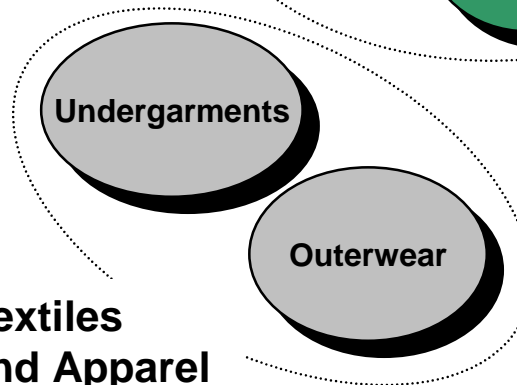
Services



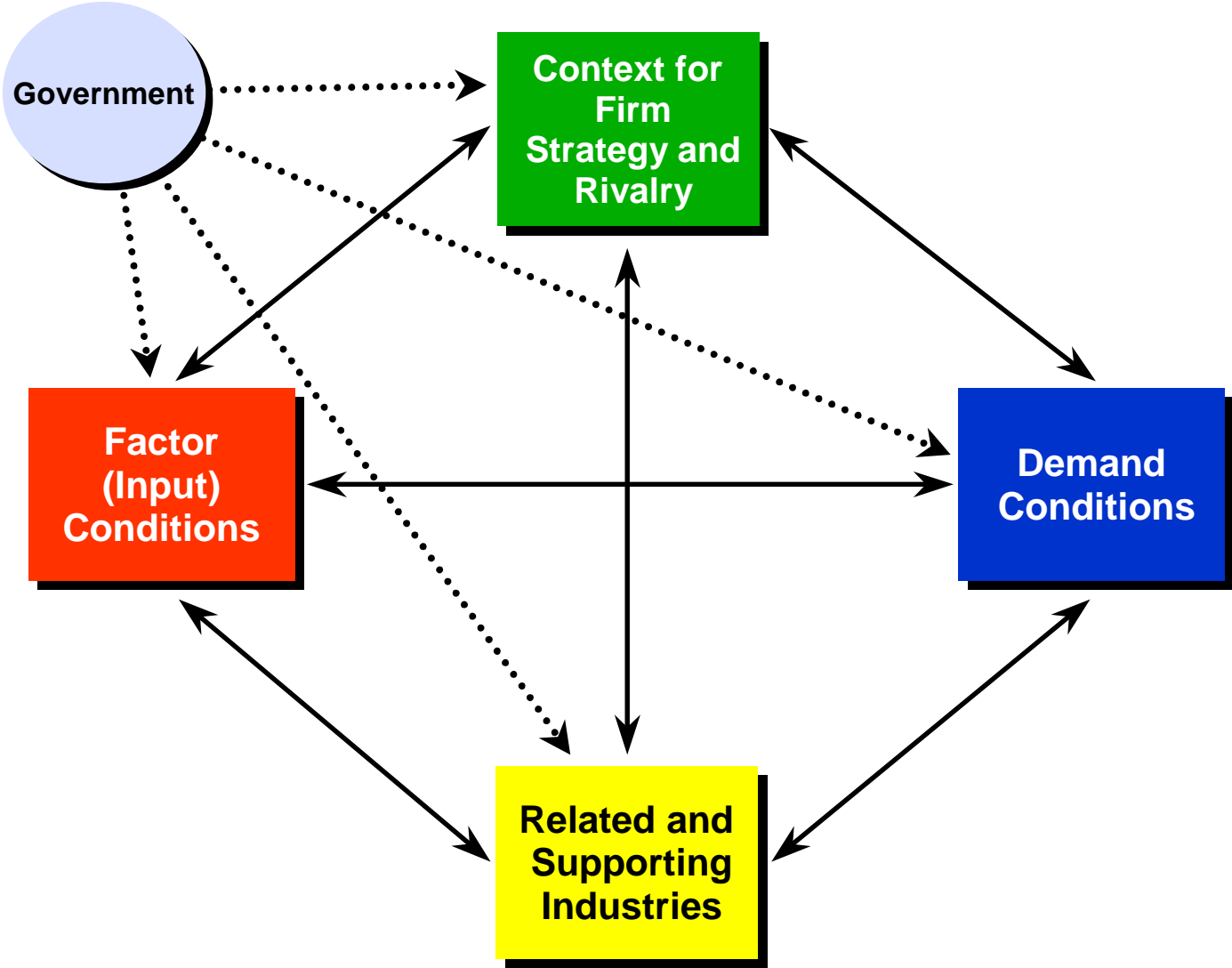
Food and Beverage



Textiles and Apparel



Government Policies and the Business Environment



Appropriate Roles of Government in Economic Development

1. Establish a **stable and predictable** macroeconomic, political, and legal environment
2. Improve the availability, quality, and efficiency of **general purpose inputs, infrastructure, and institutions**
3. Set overall **rules and incentives** governing competition that encourage productivity growth
4. Facilitate **cluster development and upgrading**
5. Create an explicit, ongoing **process of economic change** and competitive upgrading which informs citizens and mobilizes the private sector, government at all levels, educational and other institutions, and civil society.

Environmental Regulation and Competitiveness

- Competing based on weak environmental standards **perpetuates low incomes**
- Corporate pollution is a sign of **inefficient and unproductive use** of resources

Firm

- Inefficient extraction of resources
- Incomplete material utilization
- Unnecessary waste products
- Unnecessary energy use
- Unproductive land use

Customer

- Usable materials in products that are discarded
- Products that use energy inefficiently
- Discarded or unnecessary packaging

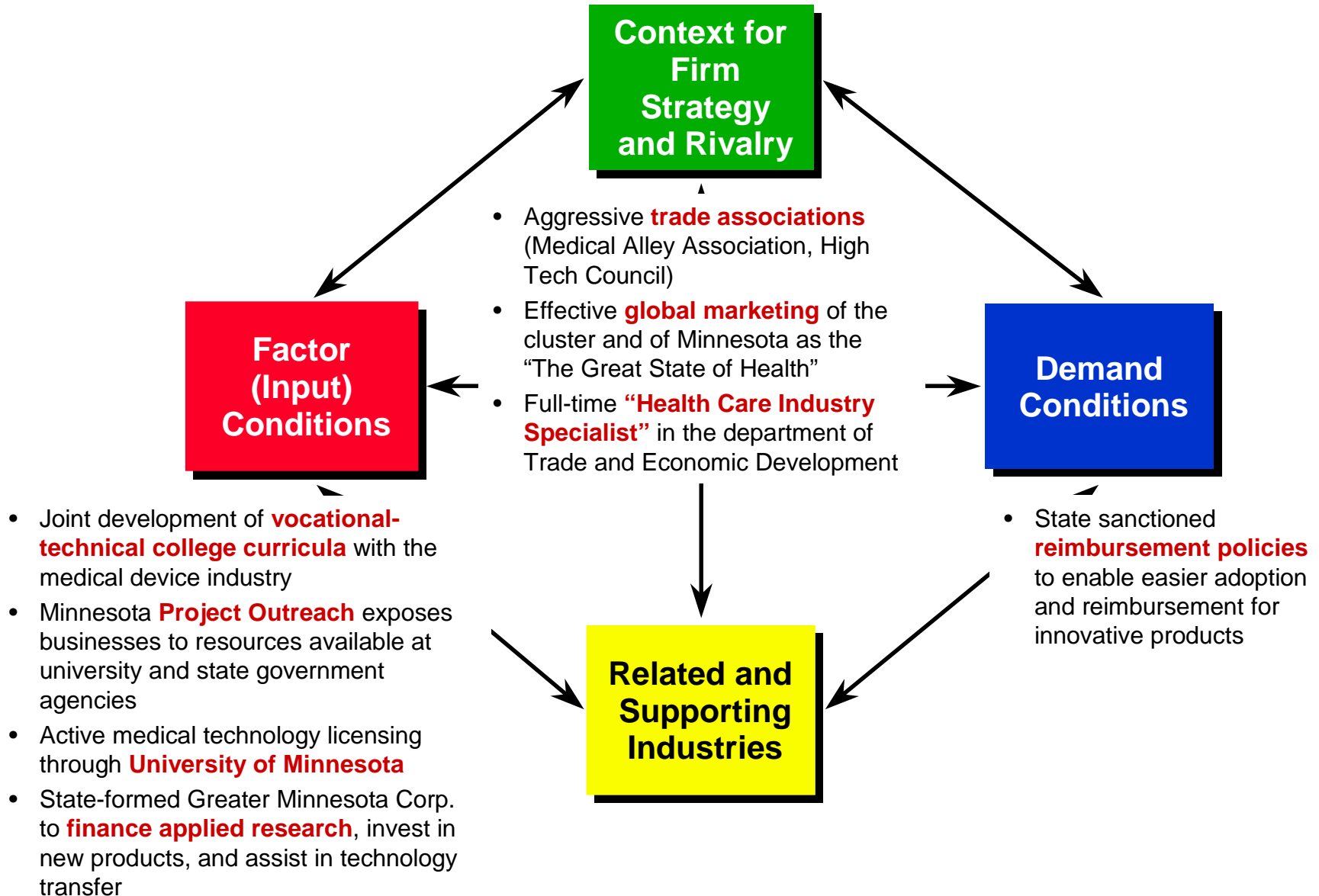
- The need to control or treat pollution causes companies to perform activities that add cost but create **no customer value**
 - e.g., handling, storage, processing, disposal
- Pollution is a reflection of **unsophisticated technology** and **weak management**



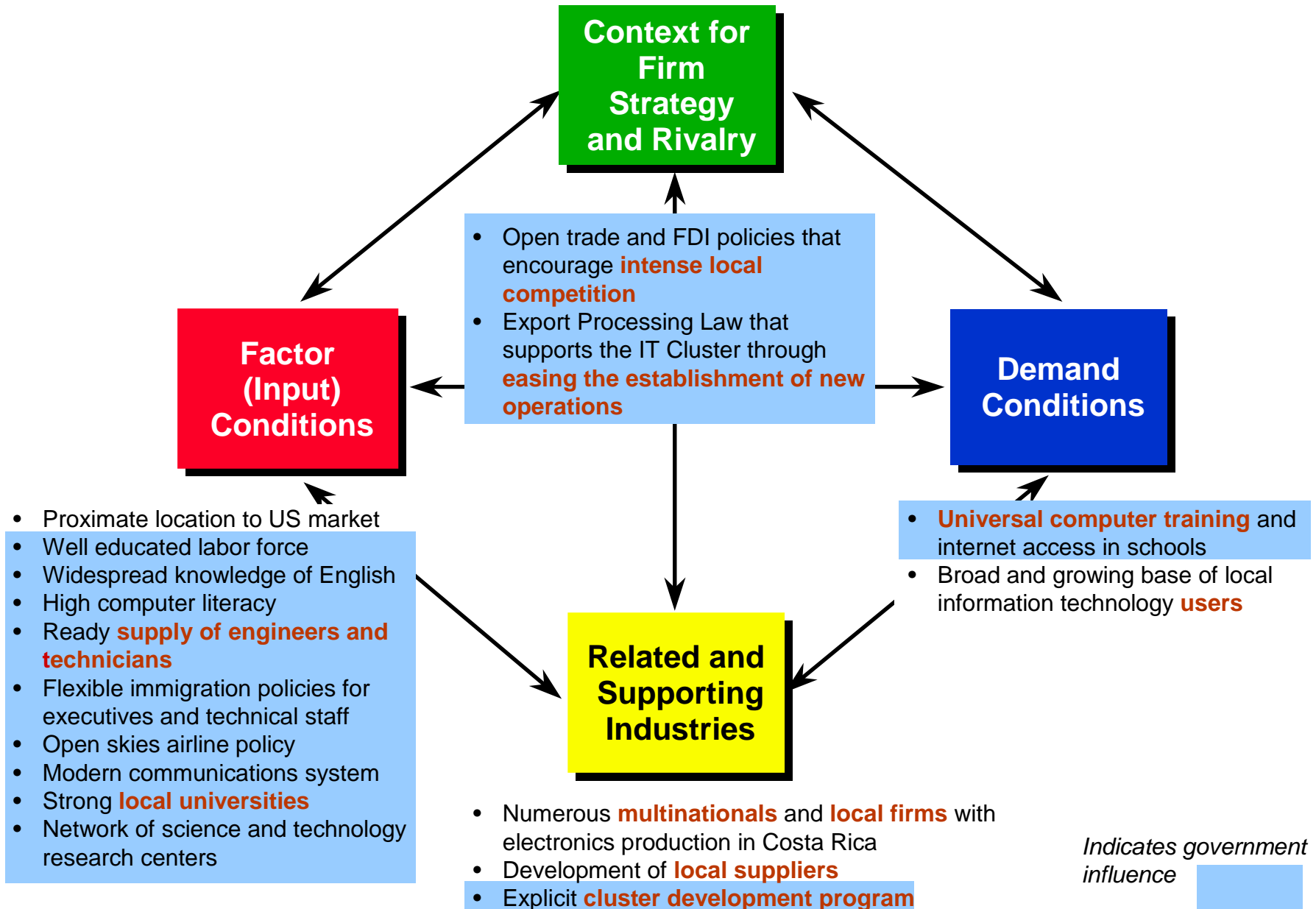
- **Strict environmental regulation** stimulates the upgrading necessary to achieve advanced economic development

Public / Private Cooperation in Cluster Upgrading

Minnesota's Medical Device Cluster



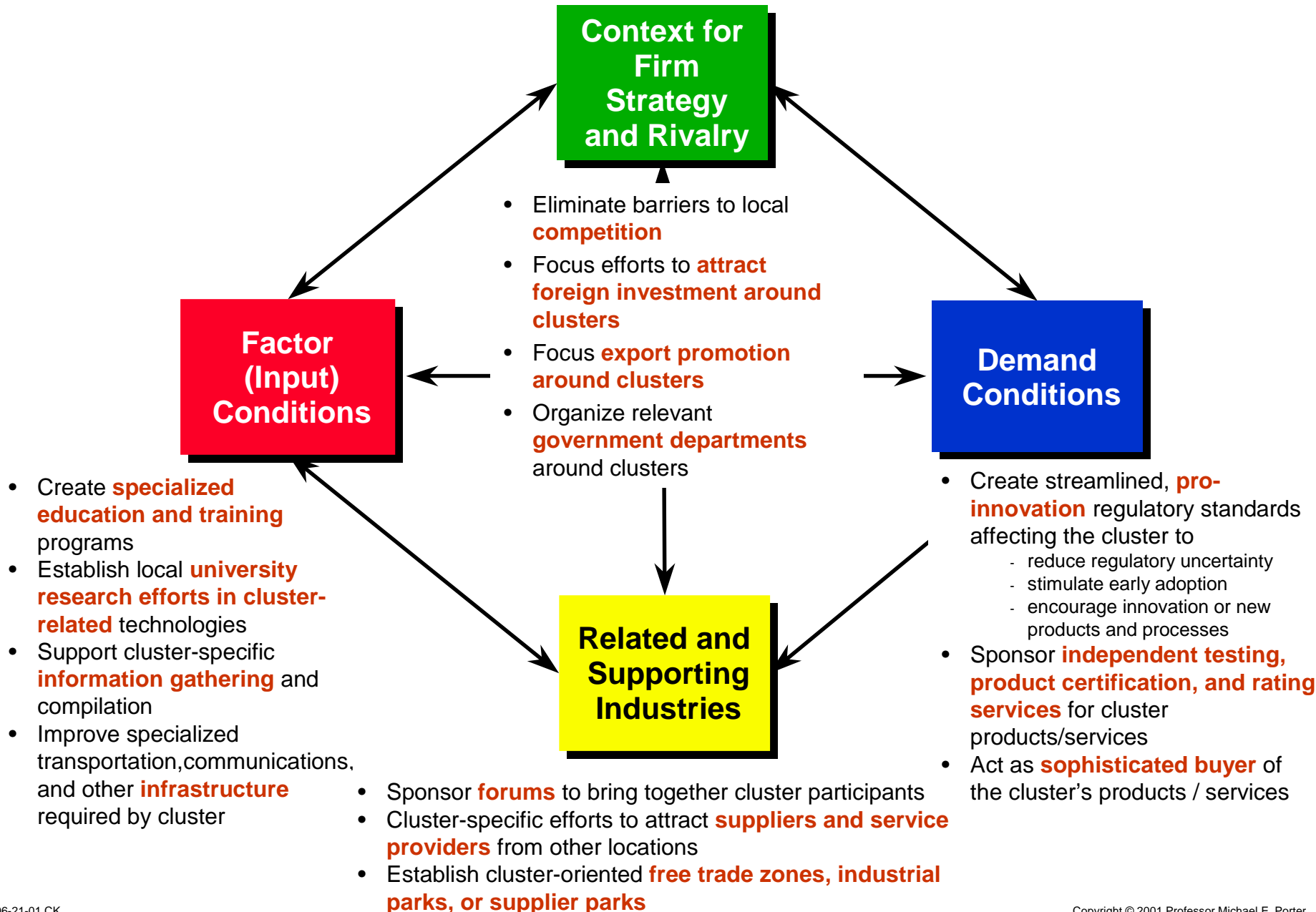
The Costa Rica Information Technology Cluster



Appropriate Roles of Government in Cluster Development

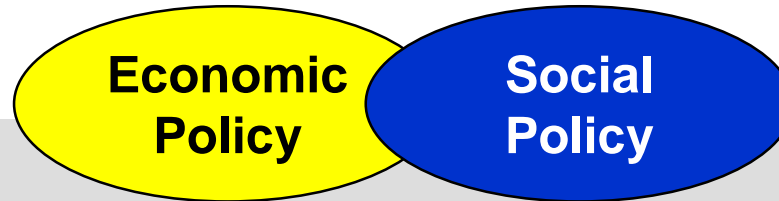
- A successful cluster policy builds on **sound overall economic policies**
- Government should support the development of **all clusters**, not choose among them
- Government policy should **reinforce established and emerging clusters** rather than attempt to create entirely new ones
- Government's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

Illustrative Government Policies for Cluster Development



Integrating Economic and Social Policy

- In the new thinking on competitiveness, there is **no inherent conflict** between economic and social policy



- A **productive and growing economy** requires:
 - Rising skill levels
 - Safe working conditions
 - Healthy workers who live in decent housing in safe neighborhoods
 - A sense of equal opportunity
 - Assimilation of underemployed citizens into the productive workforce
 - Low levels of pollution (pollution is a sign of unproductive use of physical resources)
- “Social” policies must be **aligned with productivity** in the economy and prepare and motivate citizens to **succeed in the market system**
- “Economic” policies must include explicit programs to **raise human capability** and improve the lives and the **sense of opportunity** for citizens

National Business Environment

Position of Andean Countries

Competitive Advantages Relative to GDP per Capita

| | Average Ranking |
|---|-----------------|
| General Internet Use | 34 |
| Availability of Cellular Phones | 36 |
| Extent of Distorting Government Subsidies | 36 |
| Quality of Business Schools | 39 |

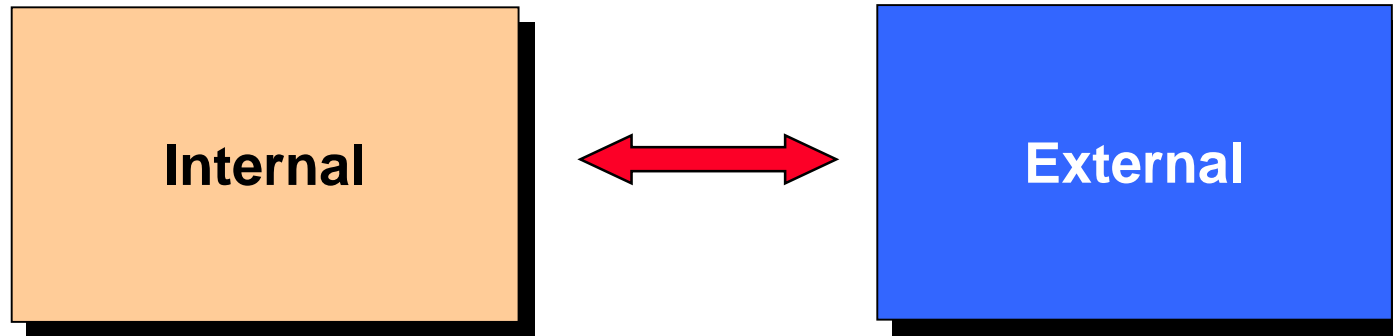
Competitive Disadvantages Relative to GDP per Capita

| | Average Ranking |
|--------------------------------------|-----------------|
| Judicial Independence | 55 |
| Quality of Public Schools | 55 |
| Venture Capital Availability | 55 |
| National Technology Position | 54 |
| Buyer Sophistication | 54 |
| Consumer Adoption of Latest Products | 54 |
| Demanding Regulatory Standards | 54 |
| Administrative Burden for Start-ups | 54 |
| Business Information Availability | 54 |

Note: Simple average of rankings for five Andean countries; average country ranking for this group is 53 (out of 58)

Source: Porter, Michael E. "The Current Competitiveness Index: Measuring the Microeconomic Foundations of Prosperity," *The Global Competitiveness Report 2000*. New York: Oxford University Press, 2000

Perspectives on the Sources of Company Success



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

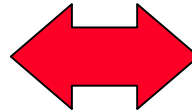
Company Operations and Strategy

**Operational
Effectiveness**

- Assimilating, attaining, and extending **best practice**



Do the same thing better



**Strategic
Positioning**

- Creating a **unique** and **sustainable** competitive position



Compete in a different way

Typical Company Strategies in Developing Countries

Corporate Direction

- **Opportunistic**, pursuing profitable opportunities in whatever area they arise
- Take advantage of **government relationships** and **concessions**
- Create **conglomerate** business groups with overall scale and operations in disparate areas

Strategic Positioning

- **Wide product line** serving all local industry segments
- Compete mainly on **price**
- **Imitate** offerings of foreign and other domestic companies
- Rely on **low wage rates** and **cheap natural resources** as competitive advantages

Activities

- Emphasize **manufacturing activities** in the value chain
- **Low investment** in machinery, equipment, brands, R&D, or training
- **Foreign partners** provide many inputs, know how, and financing
- Financing via **short-term bank borrowing**

Company Operations and Strategy

Position of Andean Countries

Competitive Advantages Relative to GDP per Capita

| | Average Ranking |
|-------------------------------|-----------------|
| Extent of Branding | 44 |
| Senior Management Recruitment | 44 |
| Extent of Regional Sales | 46 |

Competitive Disadvantages Relative to GDP per Capita

| | Average Ranking |
|--|-----------------|
| Value Chain Presence | 54 |
| Control of International Distribution | 53 |
| Company Spending on R&D | 53 |
| Production Processes | 51 |
| Licensing of Foreign Technology | 51 |

Note: Simple average of rankings for five Andean countries; average country ranking for this group is 53 (out of 58)

Source: Porter, Michael E. "The Current Competitiveness Index: Measuring the Microeconomic Foundations of Prosperity," *The Global Competitiveness Report 2000*. New York: Oxford University Press, 2000

Internationalization from Developing Countries

Beyond Inherited Resources

Inherited comparative advantage

- Exploit the home country's natural resources and supply of low-cost labor
- Export primarily to advanced countries

Skills in exploiting comparative advantage

- Utilize skills in exploiting natural resources / abundant labor supply to expand into other resource-rich countries
- Foreign investment in other resource-rich countries
- Sales primarily to advanced countries

Created competitive advantage

- Create firm-specific competitive advantage in products, processes, or marketing
- Export and foreign investment to other developing countries, especially neighbors
- Exports to focused segments of advanced economies

Internationalization Strategy

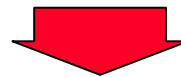
Hilasal, El Salvador

Set of Activities

- Highly customized products with rapid delivery
- R&D located at production sites to enable rapid implementation of textile technology improvements
- Design groups for fast response to custom orders
- Bilingual sales office based in Miami
- Manufacturing located in El Salvador and Mexico to minimize costs while maintaining close access to U.S. market
- State-of-the-art computer systems to track customer orders from design to shipping
- Highest quality machinery, equipment, cotton, and dyes sourced from Europe and the U.S.

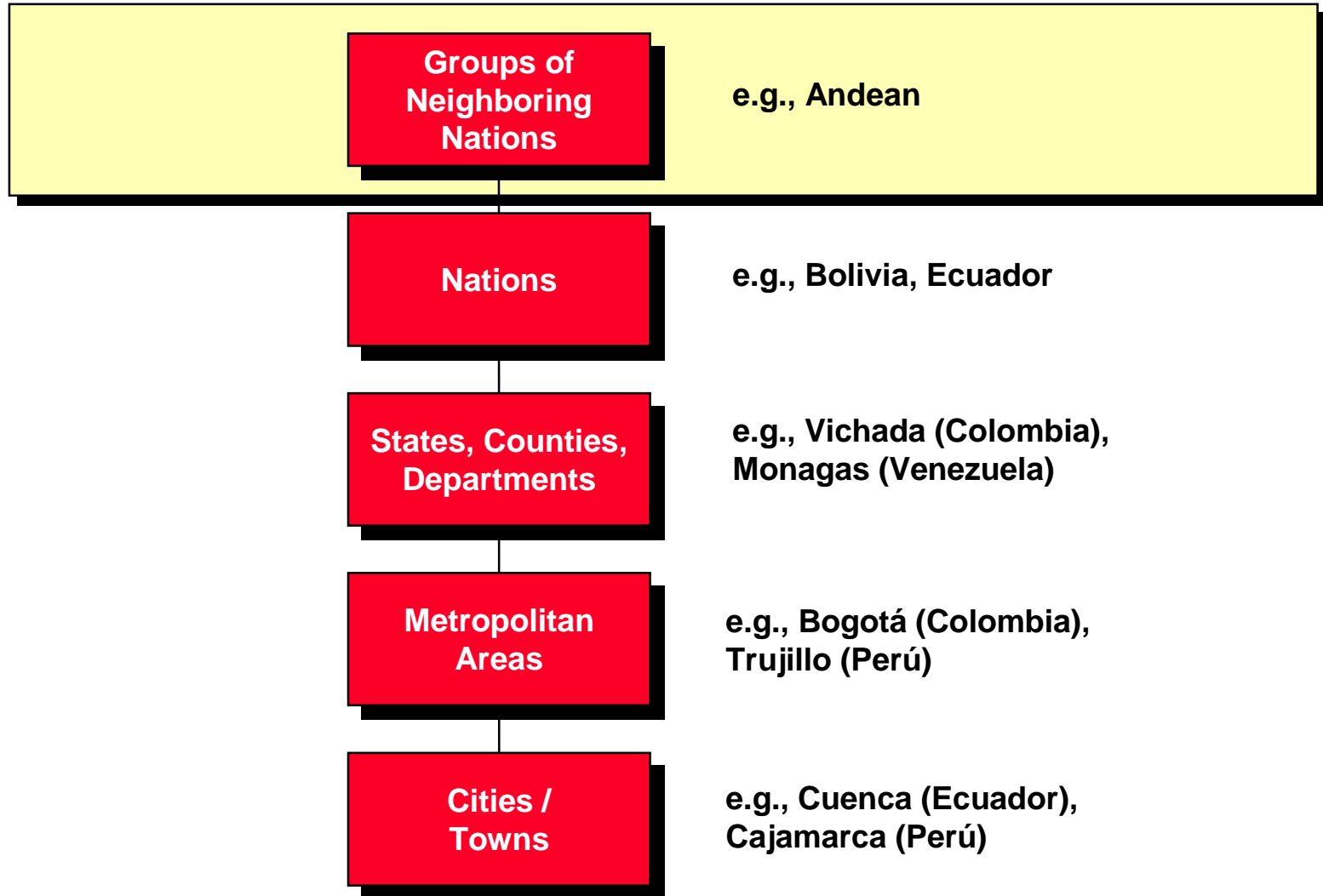
Particular Product Variety

- High quality, fashionable printed towels designed for global markets



- **Firm-based competitive advantage**
- Hilasal developed a successful differentiation-based positioning

Geographic Levels and Competitiveness



The Mutual Dependence of Nations and Regions

- A nation's economic growth and prosperity can be **greatly enhanced by a healthy regional economy**
 - Large, accessible markets for exports and foreign investment
 - Nations become far more attractive as places to invest
 - Nations can focus on their unique strengths
- A nation will **inevitably suffer** if it is isolated or an island amid countries that are not prospering
- A nation's productivity can be **greatly enhanced by regional coordination versus unilateral action**

Regional Strategy and Competitiveness

Traditional View

- Regions as **free trade zones**



New View

- A regional strategy as a powerful tool to enhance **competitiveness** in each of the countries
 - Gains from internal trade and investment
- and**
- Policy coordination that creates **mutual benefits to productivity** in all countries. Harness economies of specialization and externalities across borders in infrastructure, regulation, and other areas
 - A powerful lever for speeding up the process of economic upgrading at the **national** level
 - A lever for promoting interest and investment in the region by the **international community**

Regional Economic Coordination

Illustrative Policy Levers

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

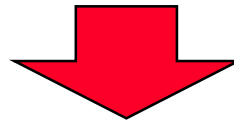
Regional Governance

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

The Process of Economic Reform

Traditional Approaches

- The dominant focus of economic reform has been on **macroeconomic** stabilization
 - Debates over the **breadth** of reform (e.g., “Big Bang” vs. incremental) and the **sequencing** of internal reforms and market opening
- **Microeconomic reforms** have focused on privatization, trade liberalization, and the reform of financial markets
- **Government** has been the overwhelming driver of the reform process



Disappointing outcomes

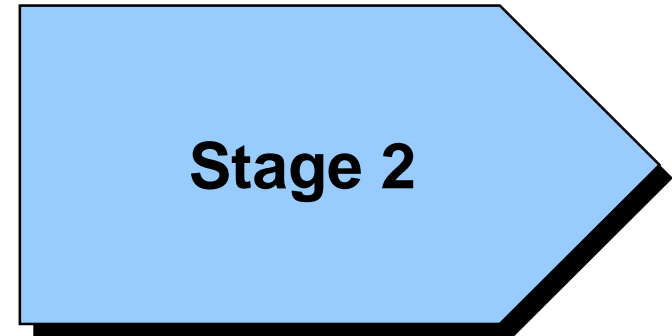
“In Canada, New Zealand, and the United Kingdom [...] macro reforms have triggered spurts of investment and growth, but have not yet materially increased the prosperity of the average citizen.”

from M. Porter; The Current Competitiveness Index: Measuring the Microeconomic Foundations of Prosperity, in *The Global Competitiveness Report 2000*, Oxford University Press (2000).

Stages of Economic Reform



- Macroeconomic stabilization
- Privatization of government-owned companies
- Opening of the economy to international trade and investment (**external** competition)
- Financial market reform and opening



- Upgrading the microeconomic business environment
- Unleashing **internal** competition
- Development of cluster-specific skills, infrastructure, supporting industries, and related institutions

Process of Economic Reform

Guidelines

- Forge strong commitment **across** political and economic groups
- Pursue macro and microeconomic reforms **in parallel**
- Create economic strategies at **multiple geographic levels** (e.g. cities, states, and national), pushing responsibilities to the local level
- Tie **social and economic reforms** together
- Create institutions that provide **continuity** and **shelter reforms from politics**
 - Independent institutions like the Central Bank
 - Private-sector led competitiveness councils that include government officials
 - Independent think-tanks to collect and publish benchmarking information
 - Cluster trade associations
- Utilize **externally focused approaches** to insulate reform from internal pressures
 - Cross-national economic strategy
 - Dollarization / Currency Zones
 - Relationships with international organizations