

Competitiveness for the Third Millennium: Implications for Mexico

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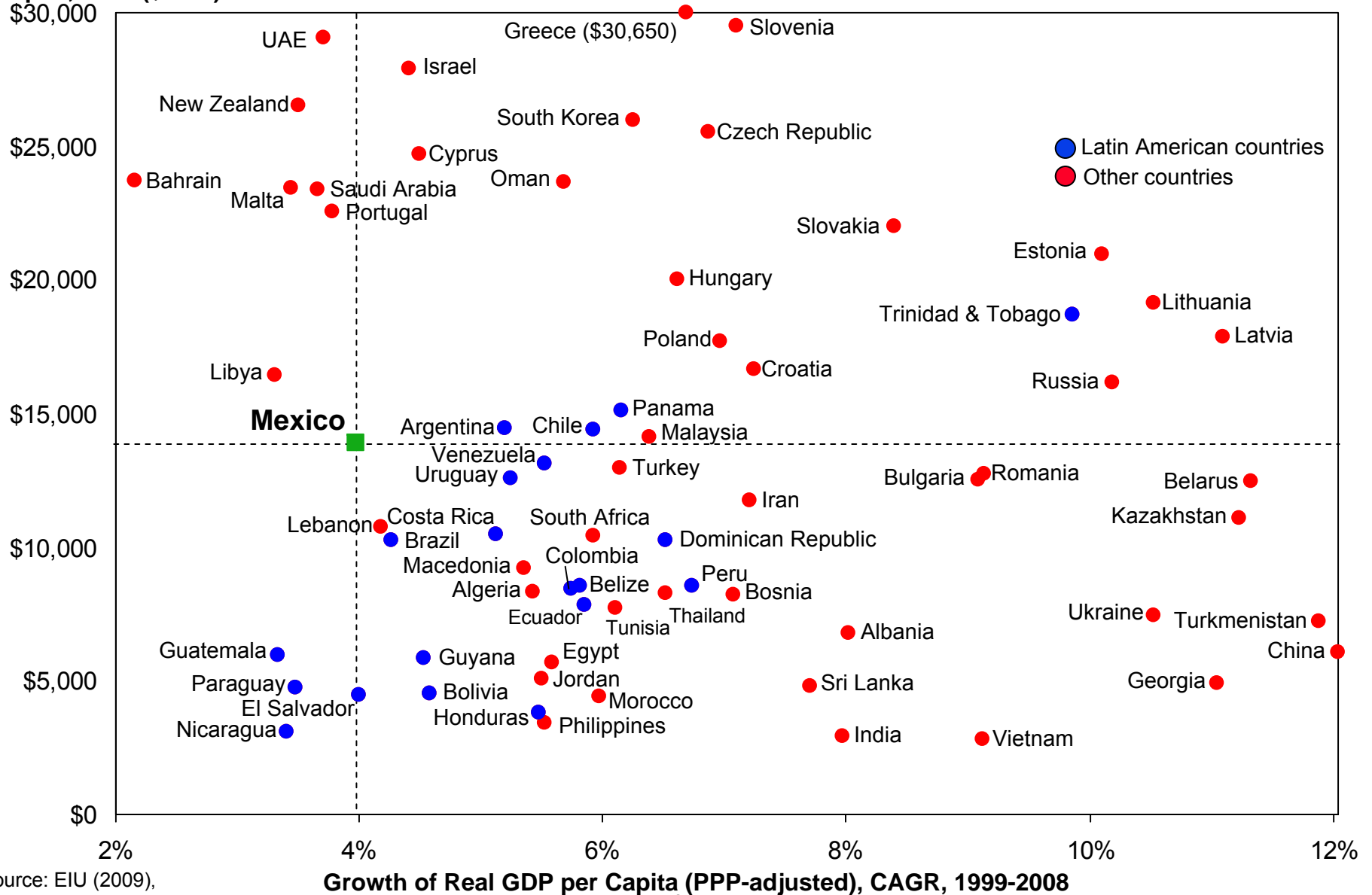
*CEO Agenda Forum
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This presentation draws on ideas from Professor Porter's books and articles, in particular, *Competitive Strategy* (The Free Press, 1980); *Competitive Advantage* (The Free Press, 1985); "What is Strategy?" (*Harvard Business Review*, Nov/Dec 1996); "Strategy and the Internet" (*Harvard Business Review*, March 2001); and a forthcoming book. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means—electronic, mechanical, photocopying, recording, or otherwise—without the permission of Michael E. Porter. Additional information may be found at the website of the Institute for Strategy and Competitiveness, www.isc.hbs.edu. Version: October 5, 2009, 4pm

Prosperity Performance

Selected Lower and Middle Income Countries

PPP-adjusted GDP per Capita, 2008 (\$USD)



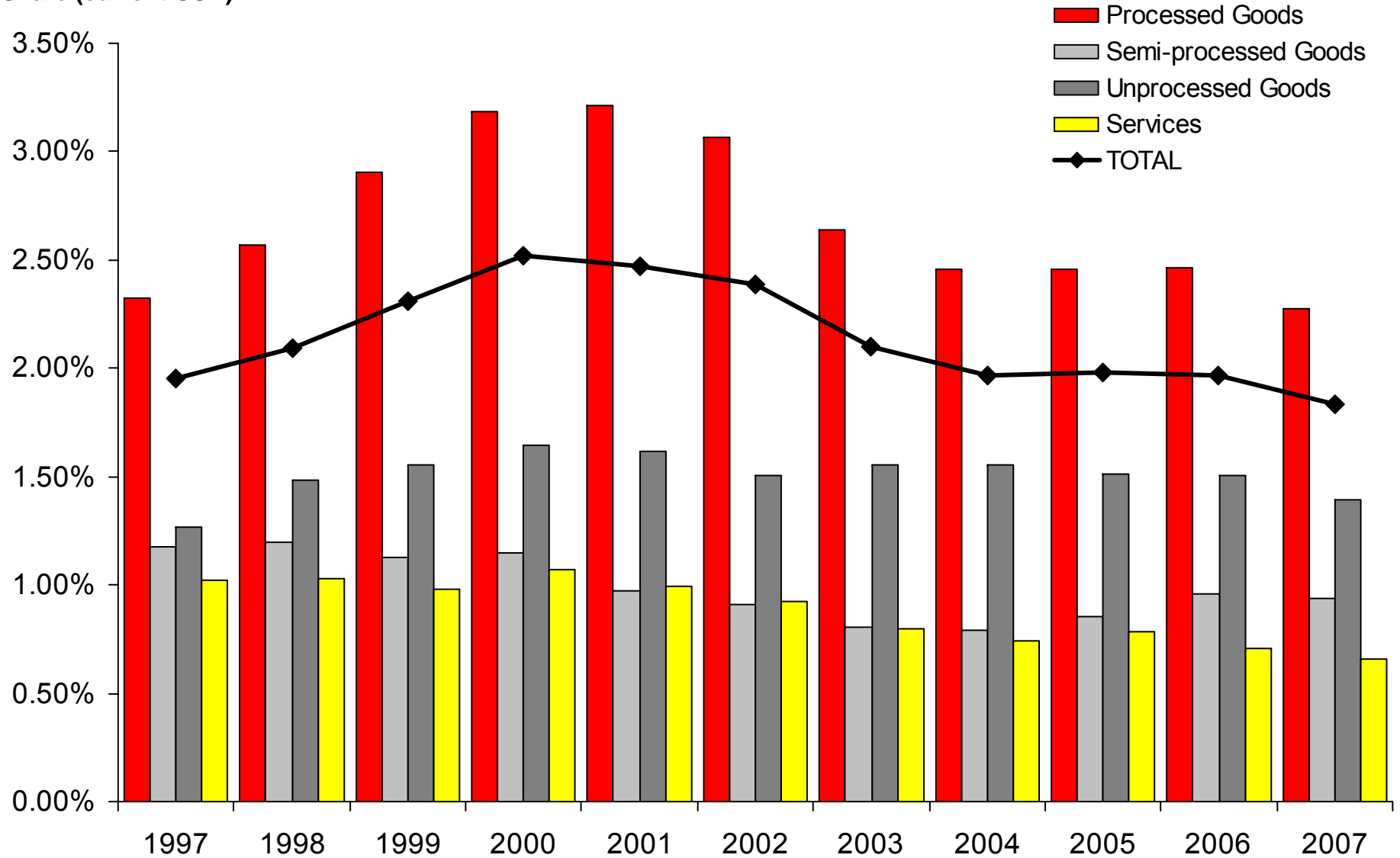
Source: EIU (2009), authors calculations

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Mexico's Exports By Type of Industry

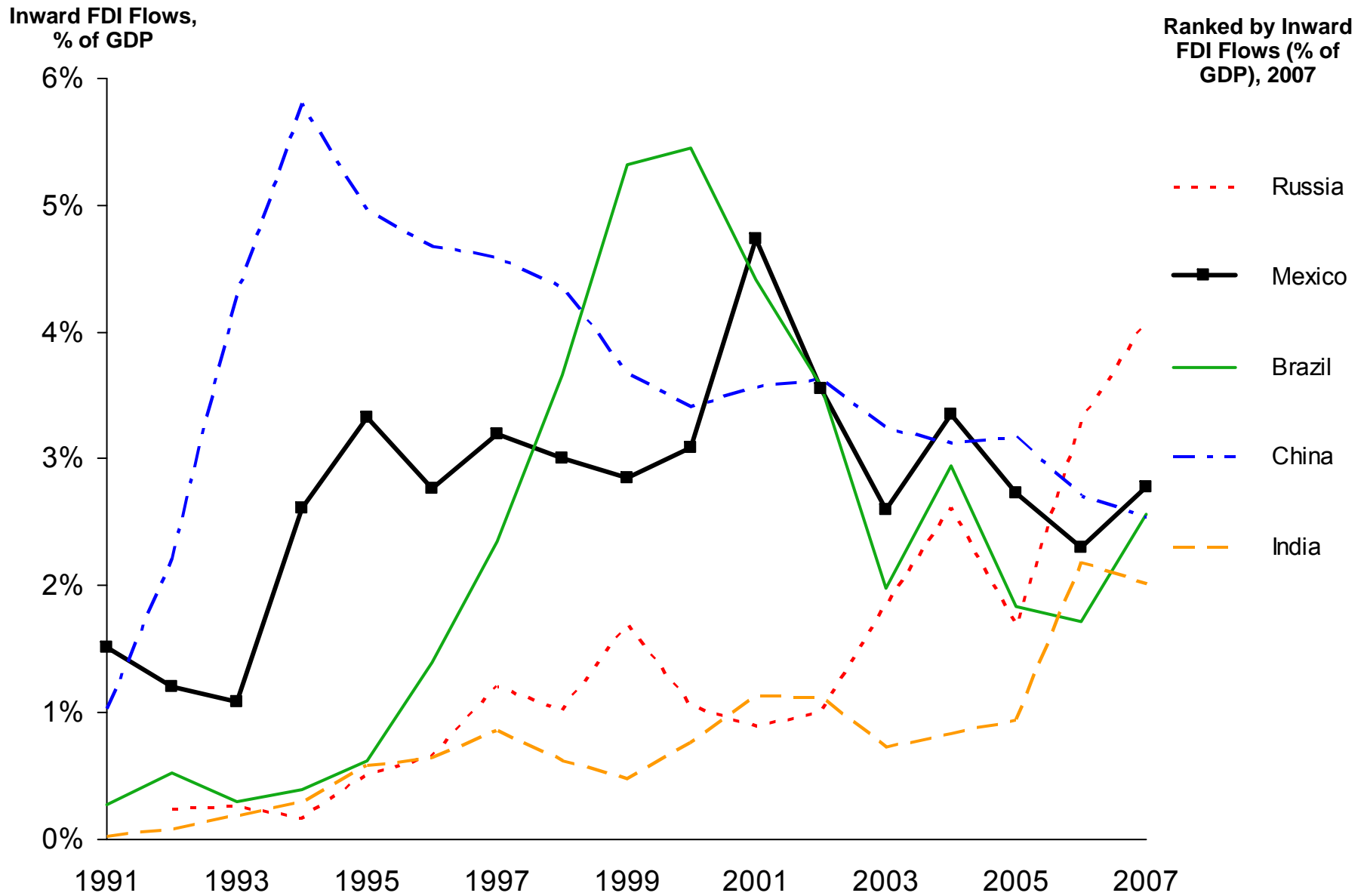
Excluding Oil and Gas Cluster

World Export Market Share (current USD)



Inbound Foreign Investment Performance

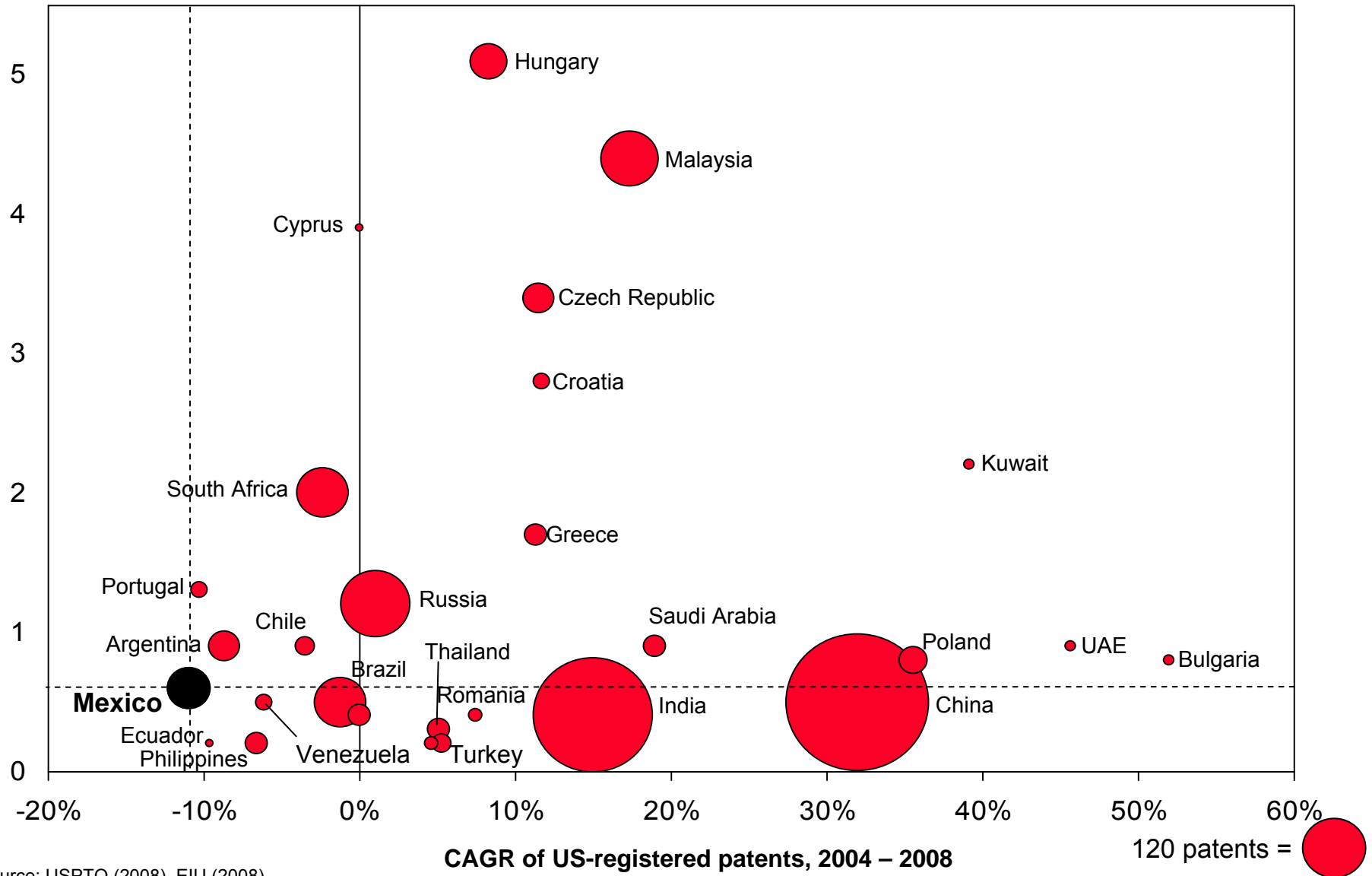
Flows, Selected Countries



Innovative Capacity

Innovation Output of Selected Countries

Average U.S. patents per 1 million population, 2004-2008



Source: USPTO (2008), EIU (2008)
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The Mexican Economy in 2009

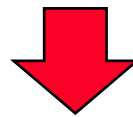
- Despite significant reforms, Mexico has experienced **slow prosperity growth** over the last several years
- The **global economic** crisis is exposing underlying weaknesses
- Mexico must **aggressively address its serious competitiveness challenges** to realize its full growth potential
 - Waiting for a United States recovery is insufficient



- Mexico must **reinvent** itself
 - Adopt and implement an **ambitious economic strategy** which builds on the country's unique competitive advantages

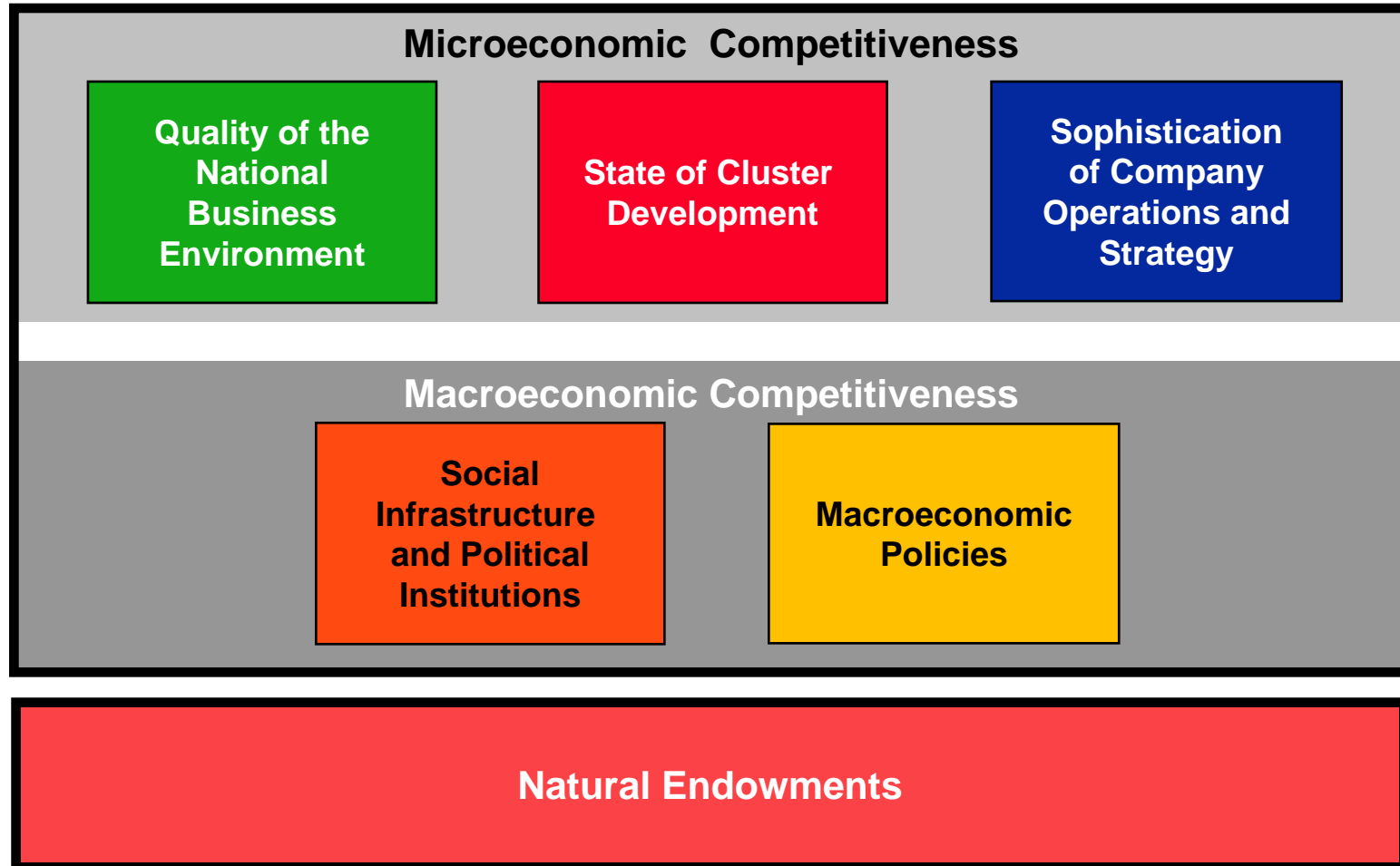
What is Competitiveness?

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



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

Determinants of Competitiveness



- Macroeconomic competitiveness creates the potential for high productivity, but is **not sufficient**
- Productivity ultimately depends on improving the **microeconomic capability** of the economy and the **sophistication of local competition**

Mexico's Macroeconomic Competitiveness

- Some progress has been made in implementing **important reforms** during the past twenty years, such as political and economic liberalization, opening of the economy, and economic diversification
- Mexico's **macroeconomic policy has been successful** in some areas, such as low inflation and low interest rates
 - However, fiscal resources are overly dependent on oil revenues and there is a narrow tax-base
 - Distortive system of taxes and subsidies is limiting competitiveness
- Mexico lags behind OECD countries on **human development indicators** in education and health
- Mexico's **political** and **governmental institutions** have improved, but remain a significant weakness
- There is a serious lack of trust in **politicians** and the effectiveness in **legislative bodies**
- Fighting **organized crime** is major government challenge and priority
- While better than regional peers, **corruption** is limiting Mexico's economic development

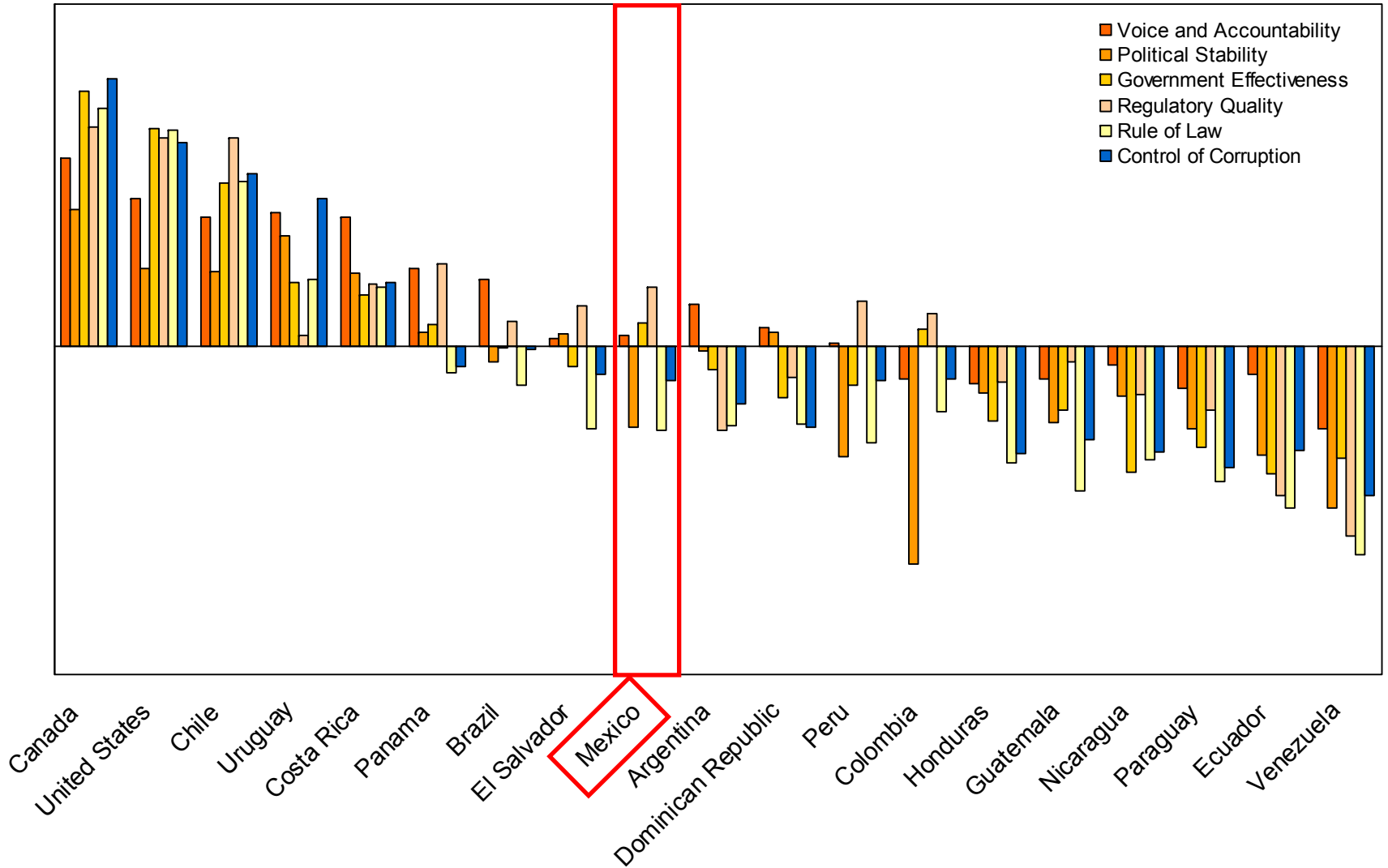
Governance Indicators

Selected Countries

Best country in the world

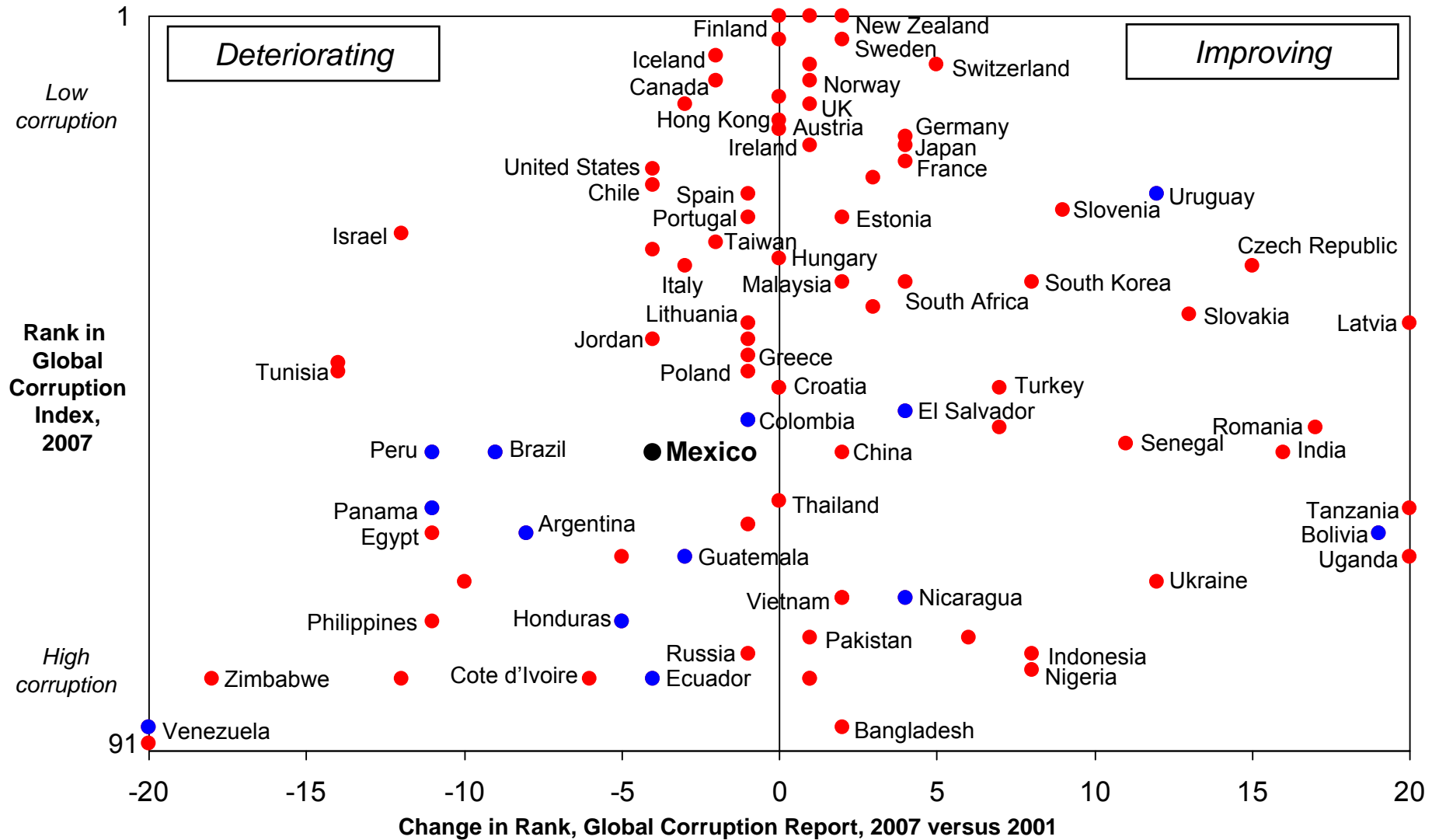
Index of Governance Quality, 2008

Worst country in the world



Note: Sorted left to right by decreasing average value across all indicators. The 'zero' horizontal line corresponds to the median country's average value across all indicators.
Source: World Bank (2009)


Corruption Perception Index, 2007



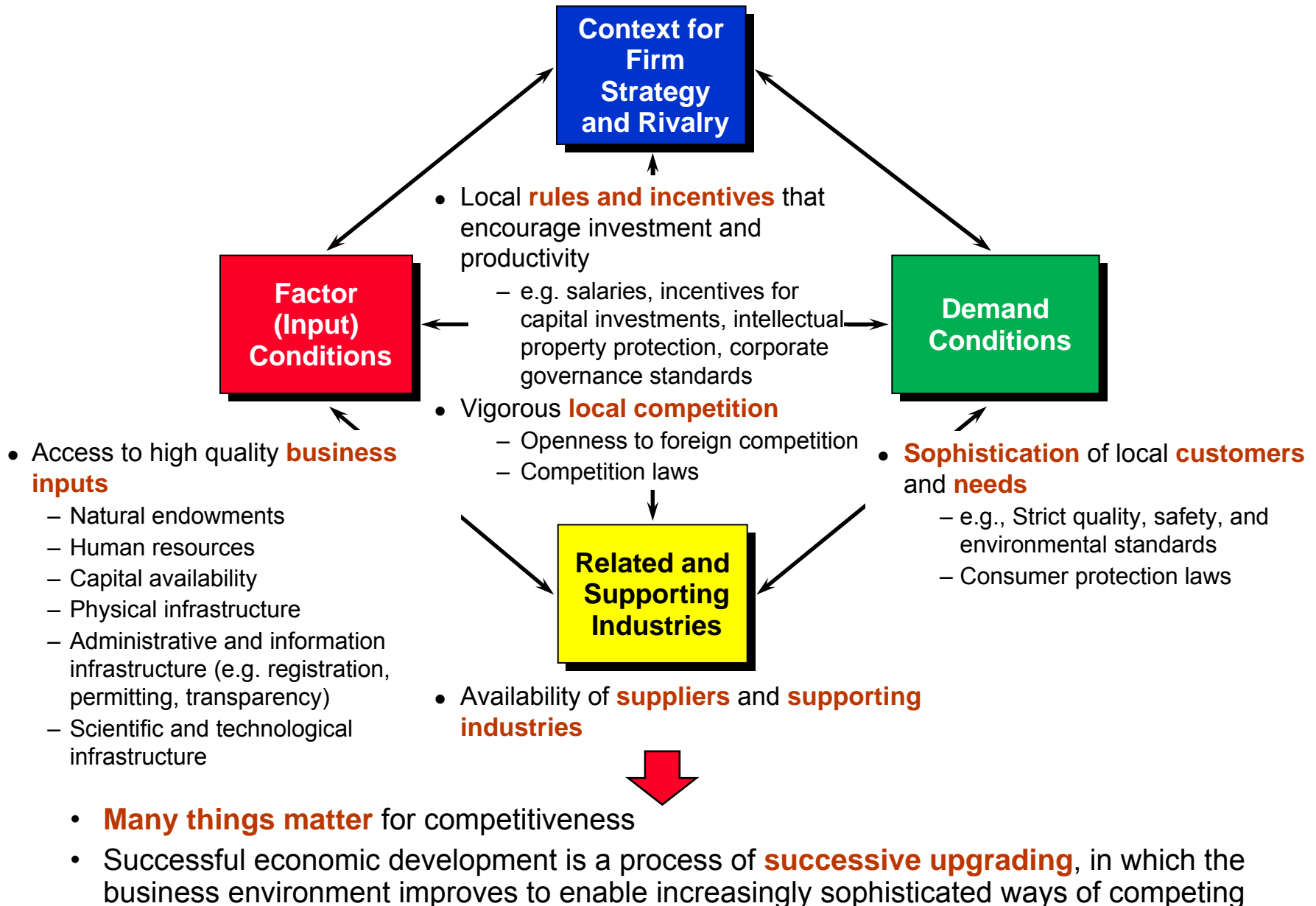
Note: Ranks only countries available in both years (91 countries total)
 Source: Global Corruption Report, 2007

Mexico's Macroeconomic Competitiveness

Action Priorities

- Build public support to continue the fight against **organized crime**
 - A **safe environment for business** is a necessary condition for competitiveness
 - Intensify the **fight against corruption**
 - Broaden the **tax base** and improve **tax-collection** capacity
 - Tackle the **system of state subsidies**
 - Upgrade the quality of **basic education** and **health**
 - Reduce reliance on the U.S. through diversification of **trading partners**
- 
- Reform **political** and **governmental** institutions to allow more effective policy

Microeconomic Competitiveness: Quality of the Business Environment



**Factor
(Input)
Conditions**

Factor (Input) Conditions

Mexico's Relative Position 2009

Competitive Advantages Relative to GDP per Capita

Soundness of banks	35	↑
Quality of domestic transport network business	44	
Financial market sophistication	52	
Overall quality of the education system	52	

Mexico's GDP per capita rank is 51 versus 128 countries

Competitive Disadvantages Relative to GDP per Capita

Quality of math and science education	125	
Ease of starting a new business	121	
Quality of the educational system	109	
Burden of government regulation	105	↑
Domestic credit to private sector	105	
Burden of customs procedures	93	↓
Quality of electricity supply	91	
Financing through local equity market	85	
Availability of scientists and engineers	85	↑
Quality of port infrastructure	82	
Mobile subscribers per 100 population	82	
Internet access in schools	79	
Time required to start a business	78	↓
Regulation of securities exchanges	77	↓
Venture capital availability	77	↑
Utility patents per million population	77	
Procedures required to start a business	75	↓
Tertiary enrollment	73	
Ease of access to loans	72	↑
Quality of railroad infrastructure	70	
Protection of minority shareholders' interests	70	↓



Change up/down of more than 10 ranks since 2008


Note: Rank versus 128 countries; overall, Mexico ranks 51st in 2008 PPP adjusted GDP per capita and 58th in Global Competitiveness

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

Context for Strategy and Rivalry

Mexico's Relative Position 2009

Competitive Advantages Relative to GDP per Capita

Openness of foreign ownership	22
FDI and technology transfer	27 
Strength of investor protection	31
Prevalence of trade barriers	49

**Mexico's GDP per capita rank
is 51 versus 128 countries**

Competitive Disadvantages Relative to GDP per Capita

Extent of market dominance by business groups	117
Quality of competition in the ISP sector	114
Efficacy of corporate boards	106
Rigidity of employment	102
Distortive effect of taxes and subsidies on competition	100
Intensity of local competition	97
Pay and productivity	96 
Market disruption from state-owned enterprises	96 
Impact of taxation on incentives to work and invest	91 
Effectiveness of antitrust policy	87 
Tariff rate	79
Intellectual property protection	77 
Strength of auditing and reporting standards	70
Cooperation in labor-employer relations	63 
Regulatory quality	57
Business impact of rules on FDI	51 



Change up/down of more
than 10 ranks since 2008

Mexico's Business Environment

Overall Strengths and Weaknesses

STRENGTHS

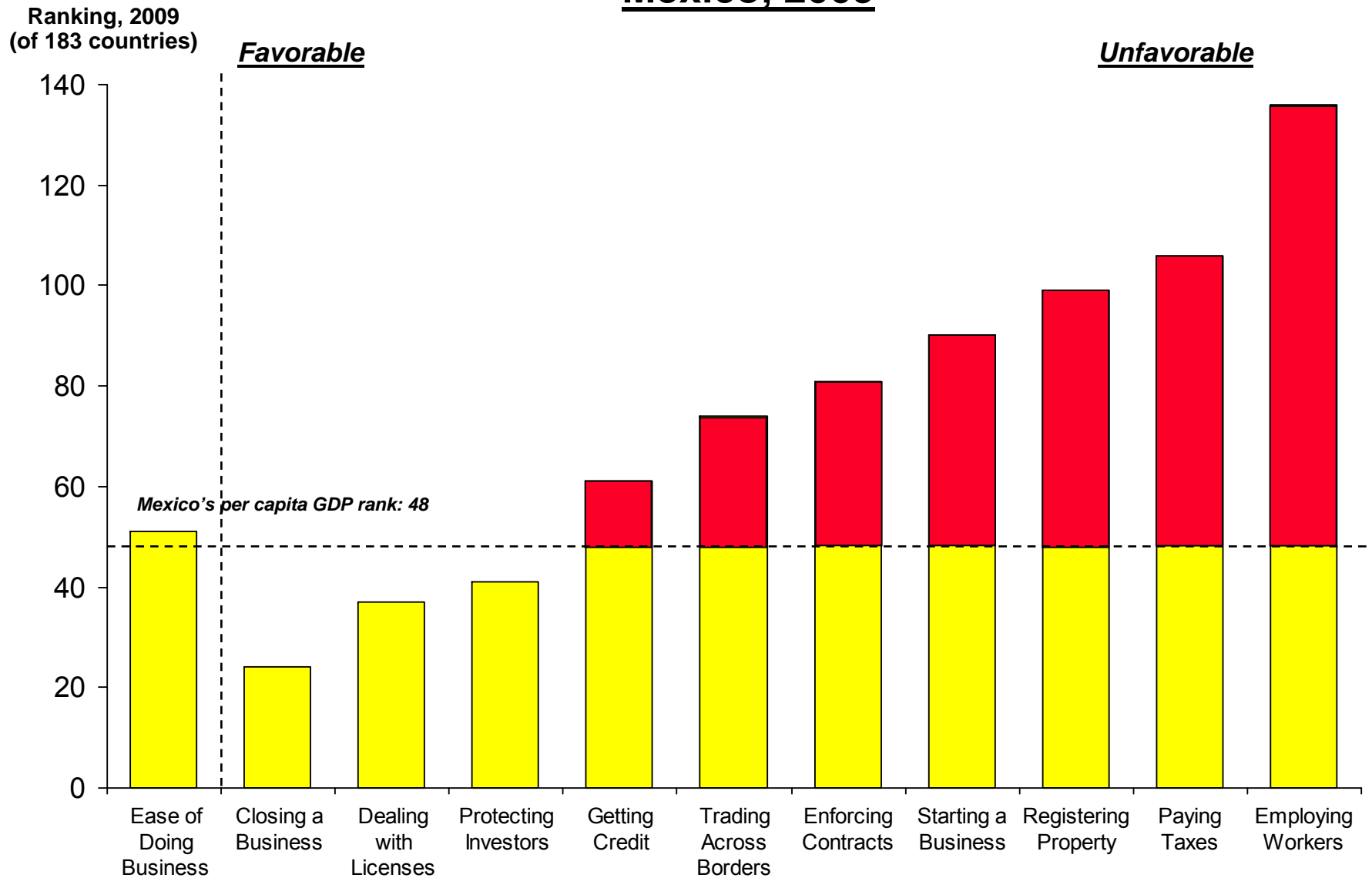
- Openness to FDI and technology transfer
- Solid basic skills and a large, young, available workforce
- Entrepreneurial population
- Good quality of roads and domestic transport network
- Sound banks
- High level of sophistication in leading Mexican companies

WEAKNESSES

- Impact of crime and violence on business
- High burden of government regulations
- Distortive tax and subsidy system
- Large informal market
- Weak primary and secondary education
- Poor higher education and training system
- Insufficient graduates in science and engineering
- Labor market inefficiencies
- Small pool of domestic credit
- Limited competition, including inefficient (public and private) monopolies and oligopolies
- Dominance of large business groups and state-owned enterprises
- Lack of innovation infrastructure
- Weak IP protection

Ease of Doing Business

Mexico, 2009



Source: World Bank Report, Doing Business (2009/10)

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Mexico's Productivity Burden

Cost

- **Security** related expenses
- Onerous bureaucratic **government regulations**
- Government **monopolies** distort markets
 - High cost and low quality of energy supply
 - High price of oil-related inputs
- Strong influence of **labor unions**
- Large **informal economy** avoids taxes and utility costs

Price

- Limited ability to **differentiate**
 - Low skilled labor force
 - Weak technology adoption
- Weak **IP protection**

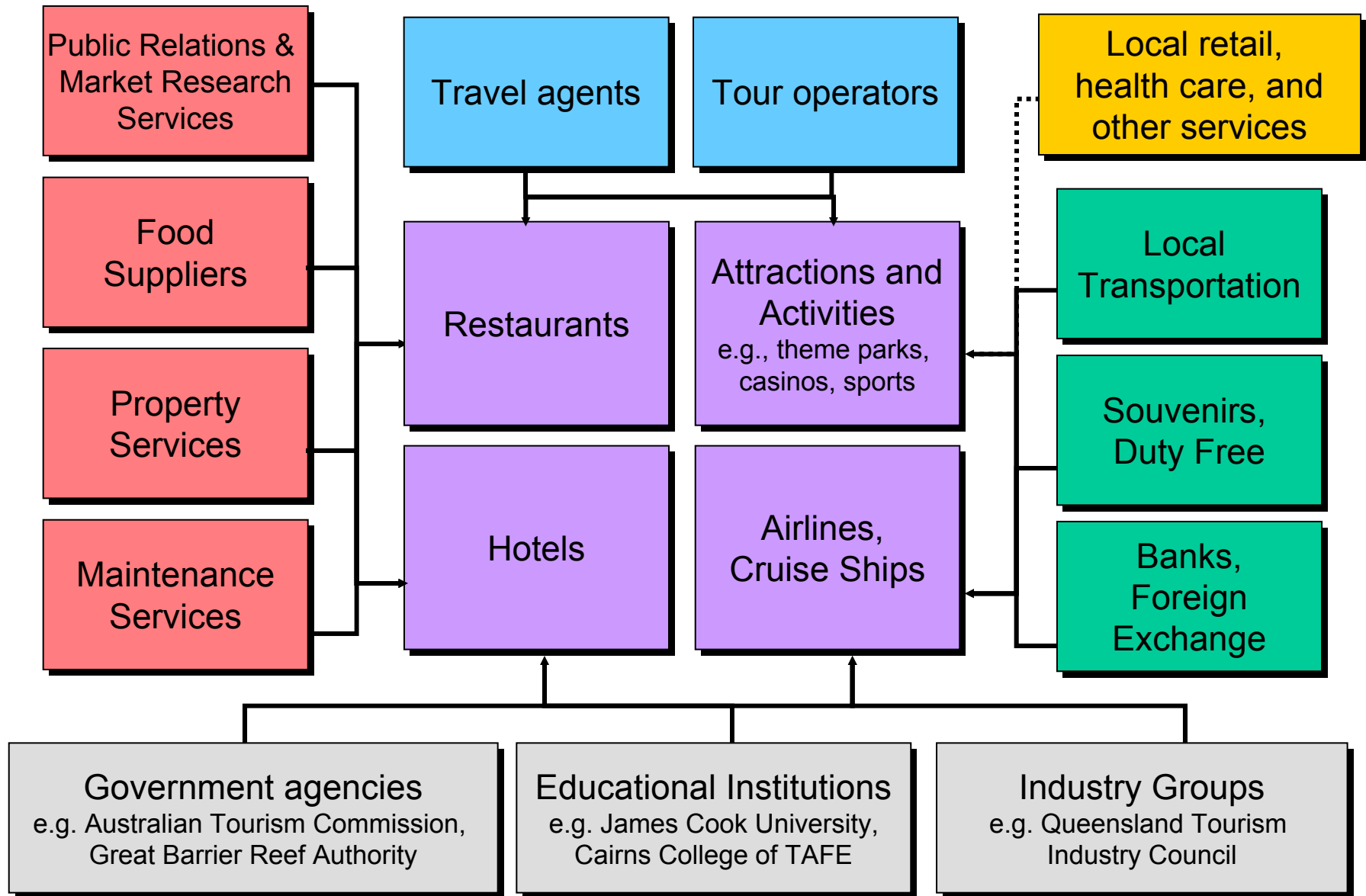
Mexico's Business Environment

Action Priorities

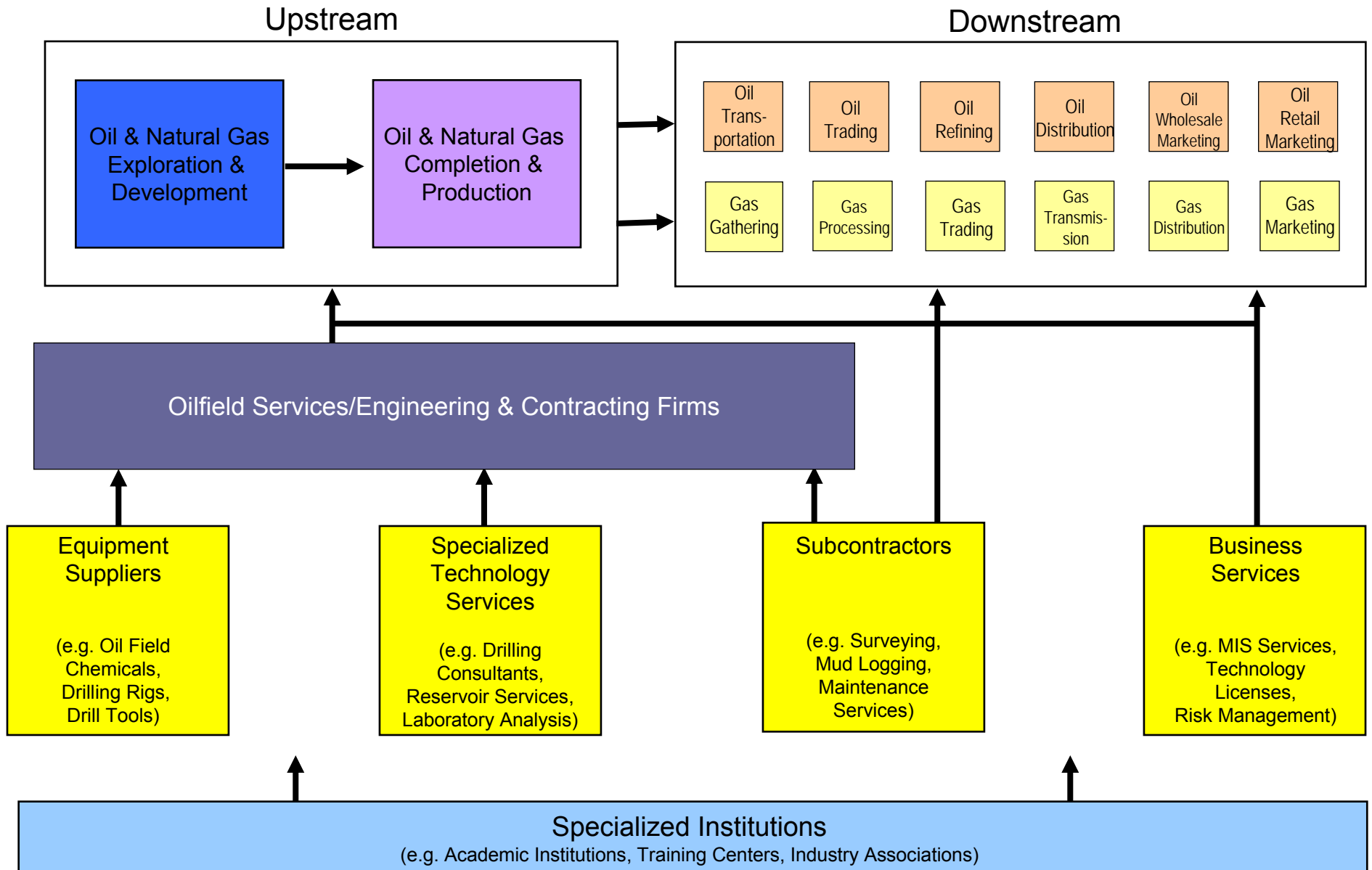
- Open up **competition**, particularly in areas with dominant firms
 - Also reduce distortive effects of subsidies
- Reform **rules** and **regulations** to ease the burden of doing business
- Reduce **labor market** rigidities
- Address other causes of **informality**
- Relax **infrastructure** bottlenecks
- Improve the quality of **higher education** and **training**
- Build **technological** and **innovation infrastructure**
- Enhance incentives for **innovation** and **entrepreneurship**
 - e.g., IP protection, venture capital

Microeconomic Competitiveness: Cluster Development

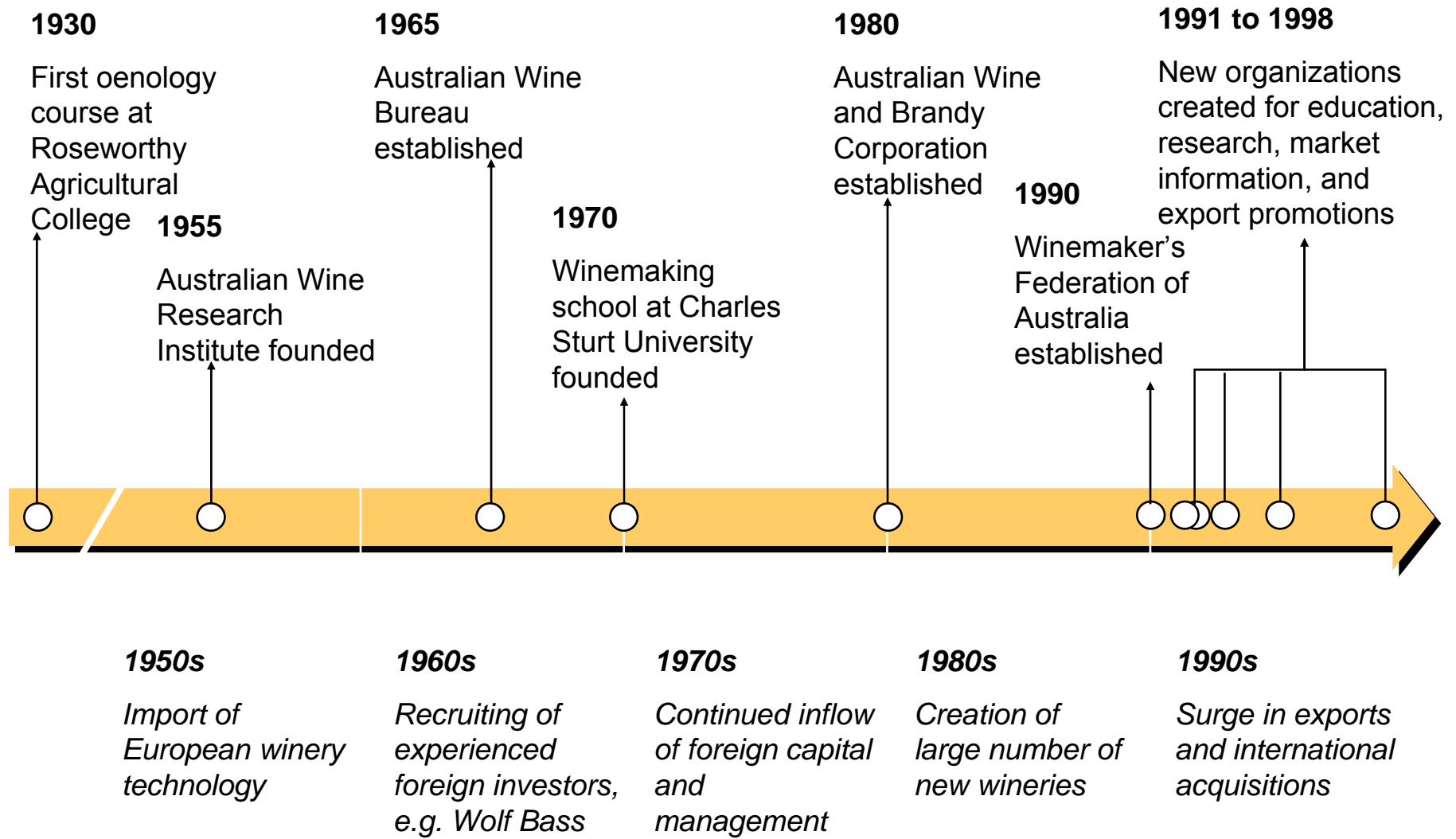
Tourism Cluster in Cairns, Australia



The Houston Oil and Gas Cluster



The Australian Wine Cluster History

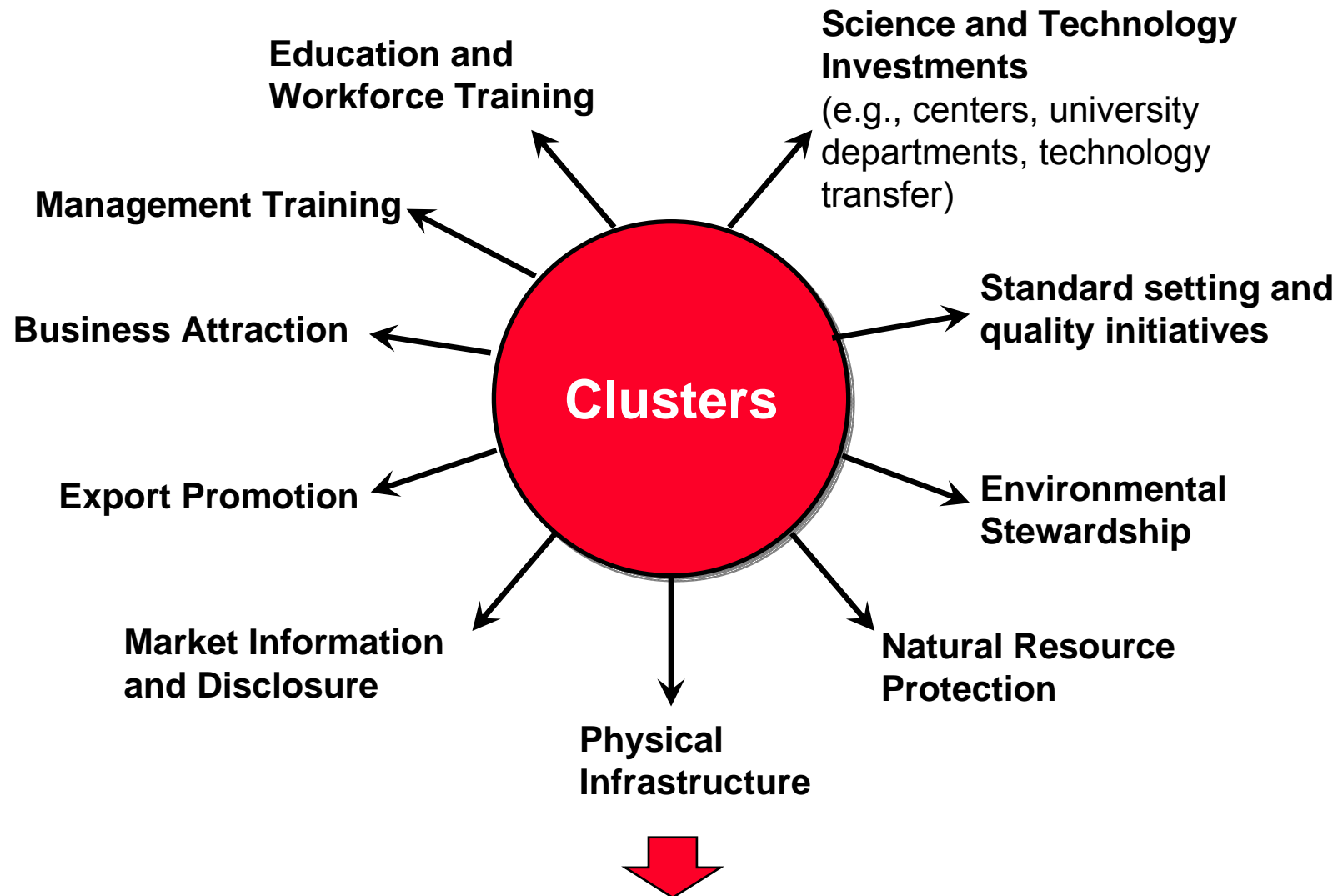


Source: Michael E. Porter and Örjan Sölvell, The Australian Wine Cluster – Supplement, Harvard Business School Case Study, 2002

Clusters as a Tool For Economic Policy

- A forum for **collaboration** between government, the private sector, trade associations, educational institutions, and research institutions
- Brings together **firms of all sizes**, including SME's
- Creates a mechanism for **constructive business-government dialogue**
- A tool to identify **problems** and concrete **action recommendations**
- A vehicle for identifying investments that strengthen **multiple firms/institutions** simultaneously
- Foster more sophisticated **competition** rather than distorting the market

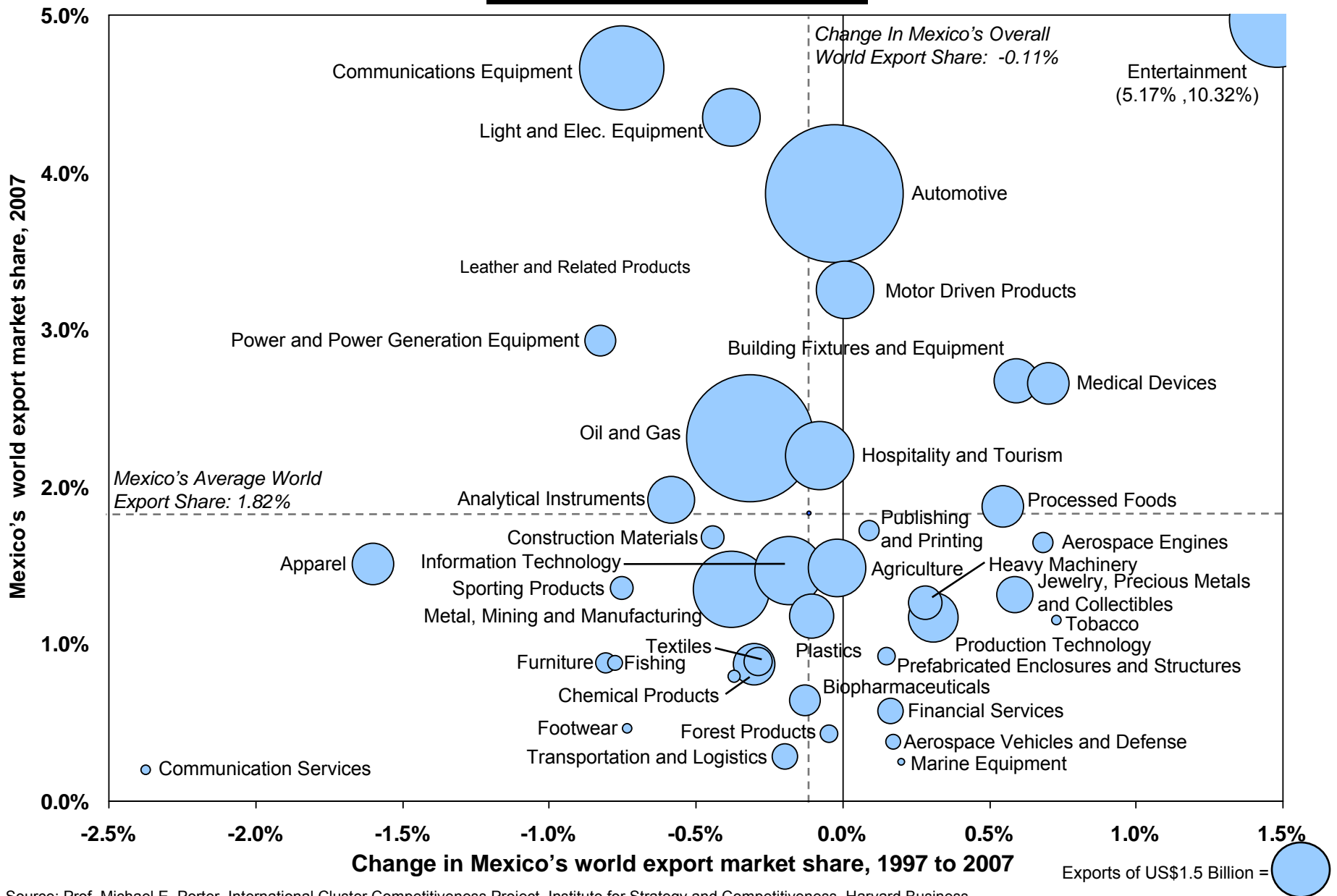
Cluster-Based Policy Implementation



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

National Export Portfolio

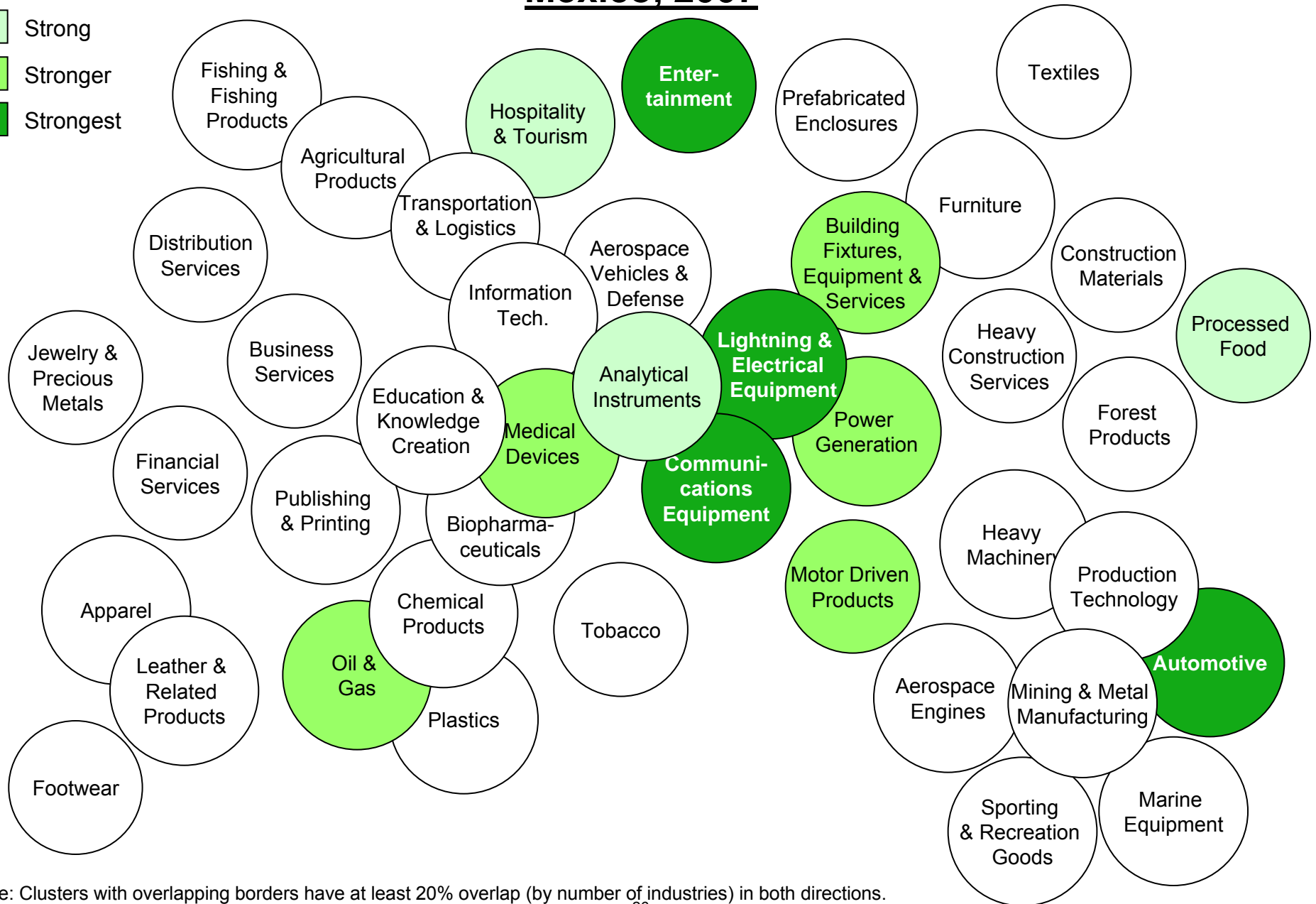
Mexico, 1997 to 2007



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

Share of World Exports by Cluster

Mexico, 2007



Note: Clusters with overlapping borders have at least 20% overlap (by number of industries) in both directions.

Cluster Development in Mexico

- Mexico has some **well developed clusters**, including automotive, petrochemicals, entertainment equipment, and communications equipment
 - FDI has helped trigger cluster formation
- Cluster development has taken place **organically**
- Mexico has a **strong network of labor cost sensitive suppliers** due to NAFTA, but most clusters rely heavily on intermediate good imports
- Existing cluster development efforts suffer from **weak coordination** between the private and public sectors

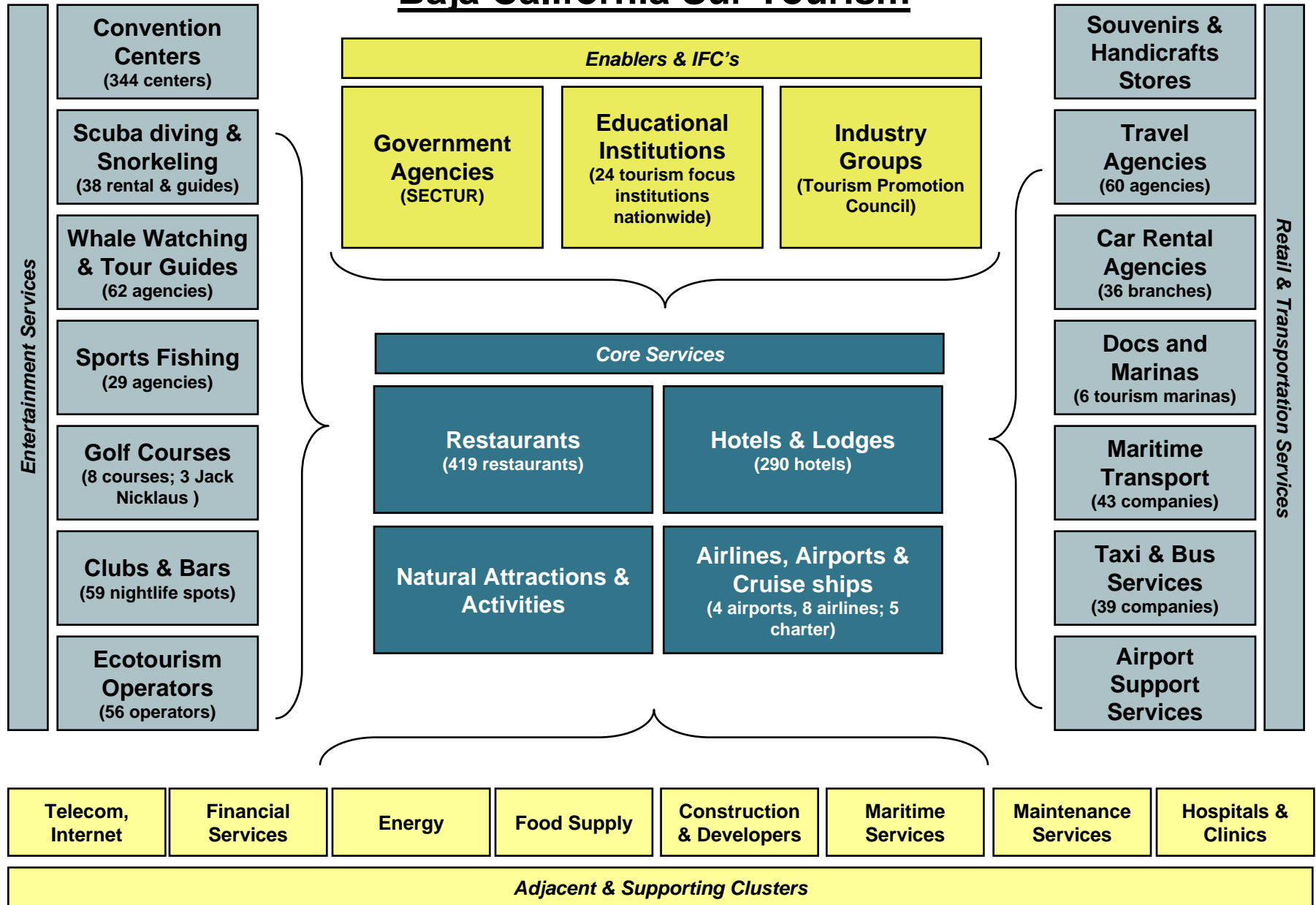
Cluster Development in Mexico

Action Priorities

- Adopt **cluster development** as a central tool for organizing business development and policy implementation
- Utilize cluster initiatives as a tool to **engage the private sector** in more effective collaboration with government at the national and regional levels
- Use clusters to organize efforts to promote **higher value exports** and **FDI attraction**
- Cluster development is an effective approach to enable the transition to an **innovation-driven development model**

Successful Mexican Clusters

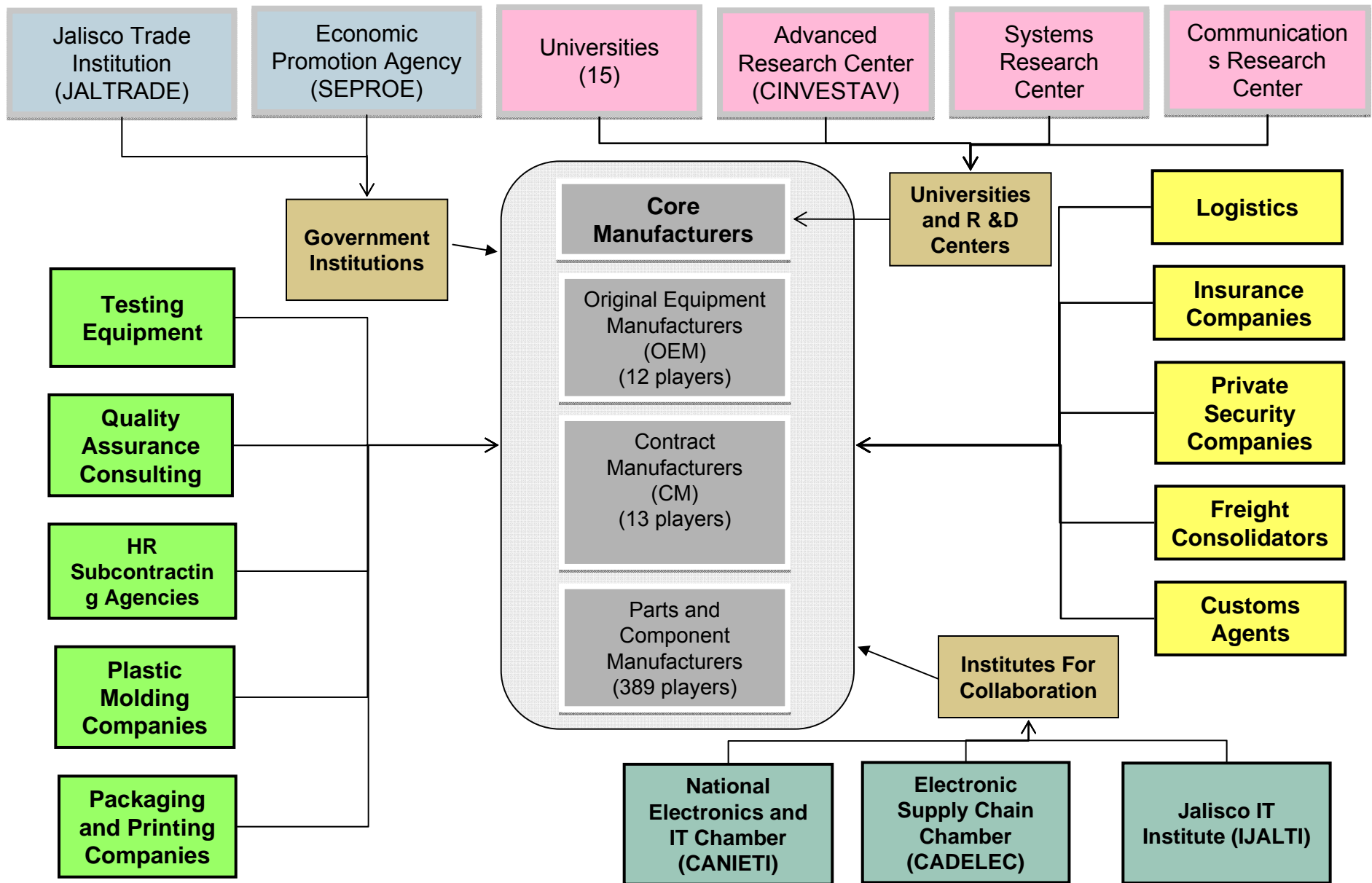
Baja California Sur Tourism



Sources: Harvard Microeconomics of Competitiveness student team research (2008) - Daniel Acevedo, Nicho Garza Sada, Jose Luis Romo, and Bernardo Vogel

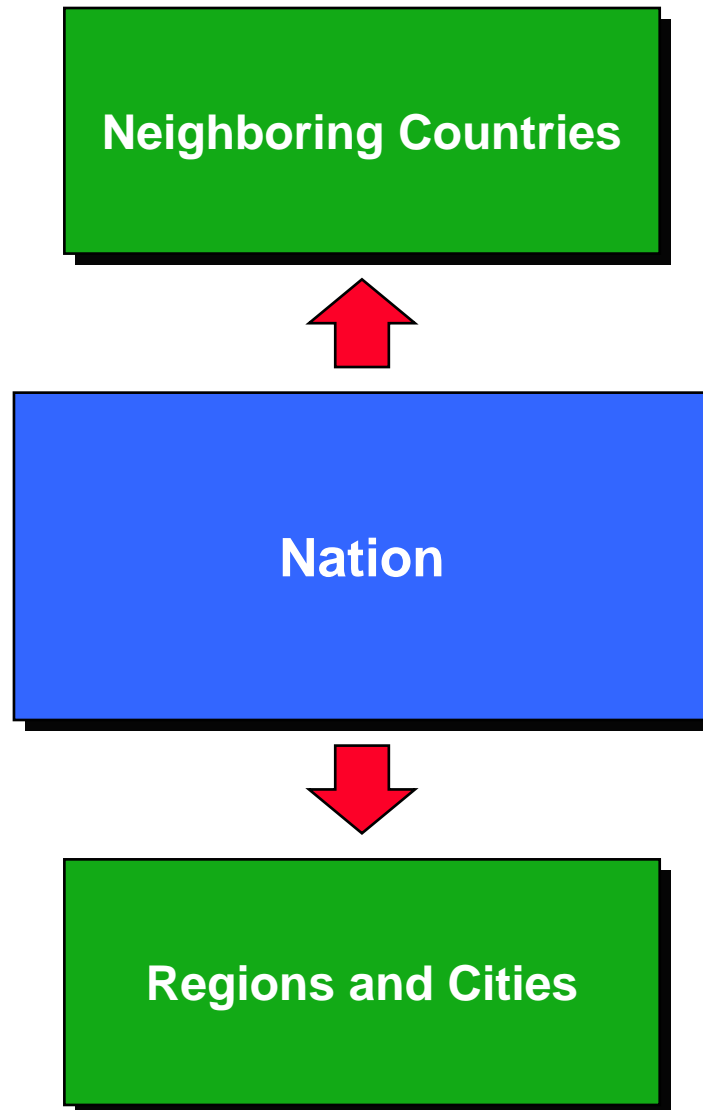
Successful Mexican Clusters

Jalisco's Electronics



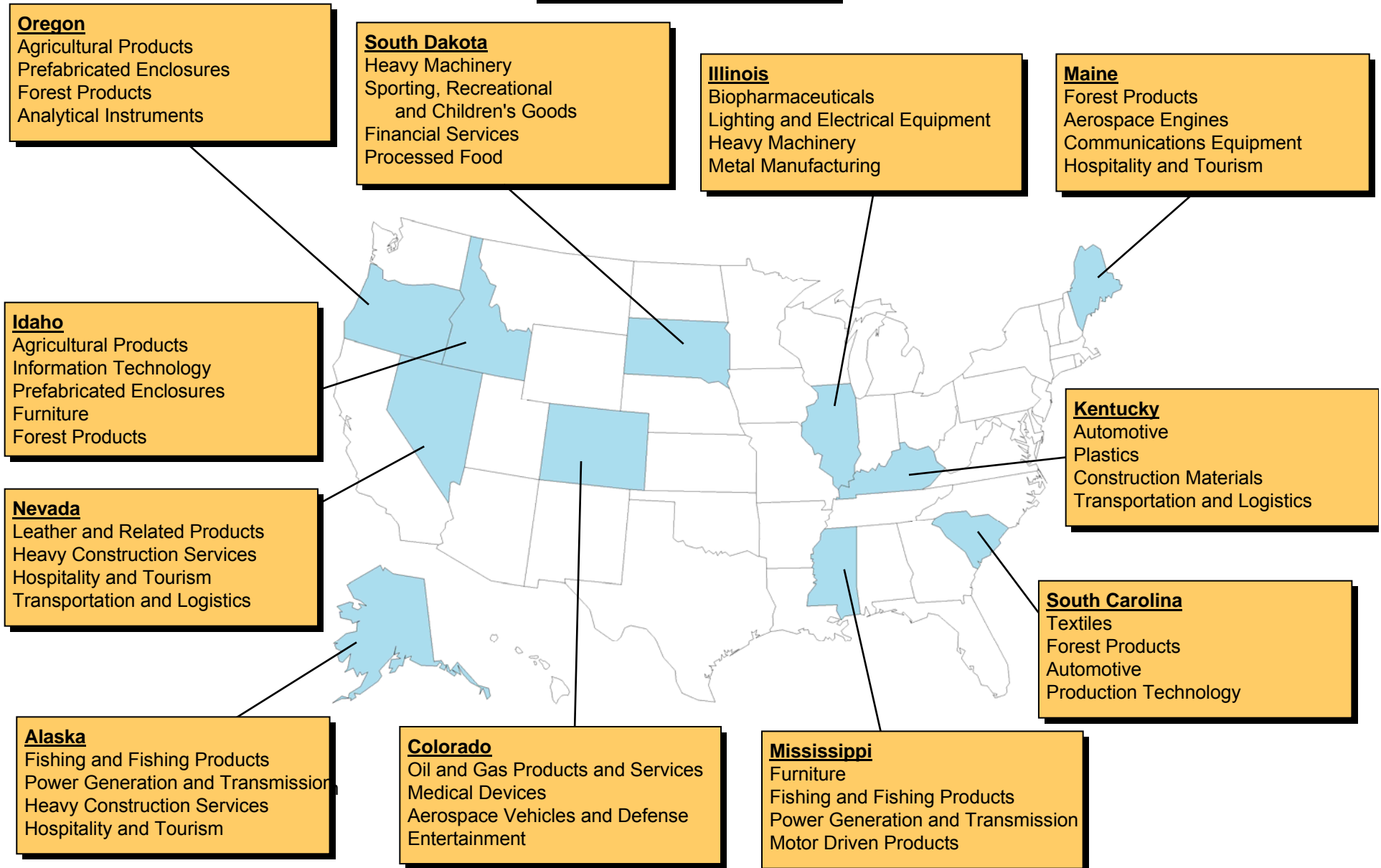
Sources: Harvard Microeconomics of Competitiveness student team research (2009) - Julian Arber Alison Chick, Gustavo De Loyola, Ina Mogollon, and Bernardo Novick

Geographic Influences on Competitiveness



Specialization by Traded Cluster

U.S. States, 2006



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

Competitiveness of Mexican States

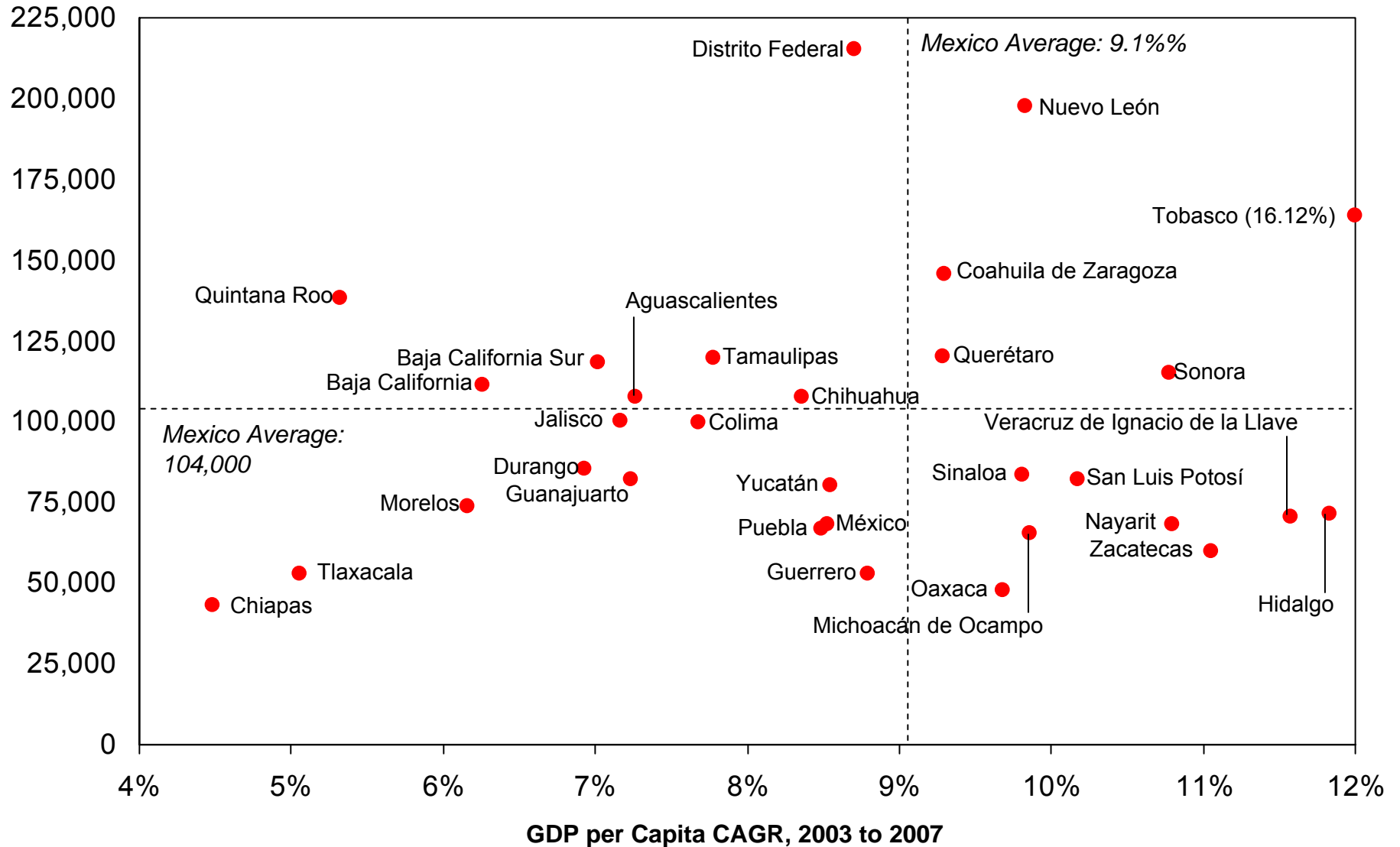


- **Strong disparities** exist across Mexican states in business environment, innovative capacity, and economic performance
 - Greater specialization since NAFTA, especially in Northern border states
 - Growth potential in Southern states depressed by poverty and failure to capitalize on NAFTA
- **Decentralization of economic policy** is essential to success in large countries such as Mexico

Prosperity Performance

Mexican States

GDP per Capita, 2007
(MXN Pesos)



Source: Mexican Statistical Office

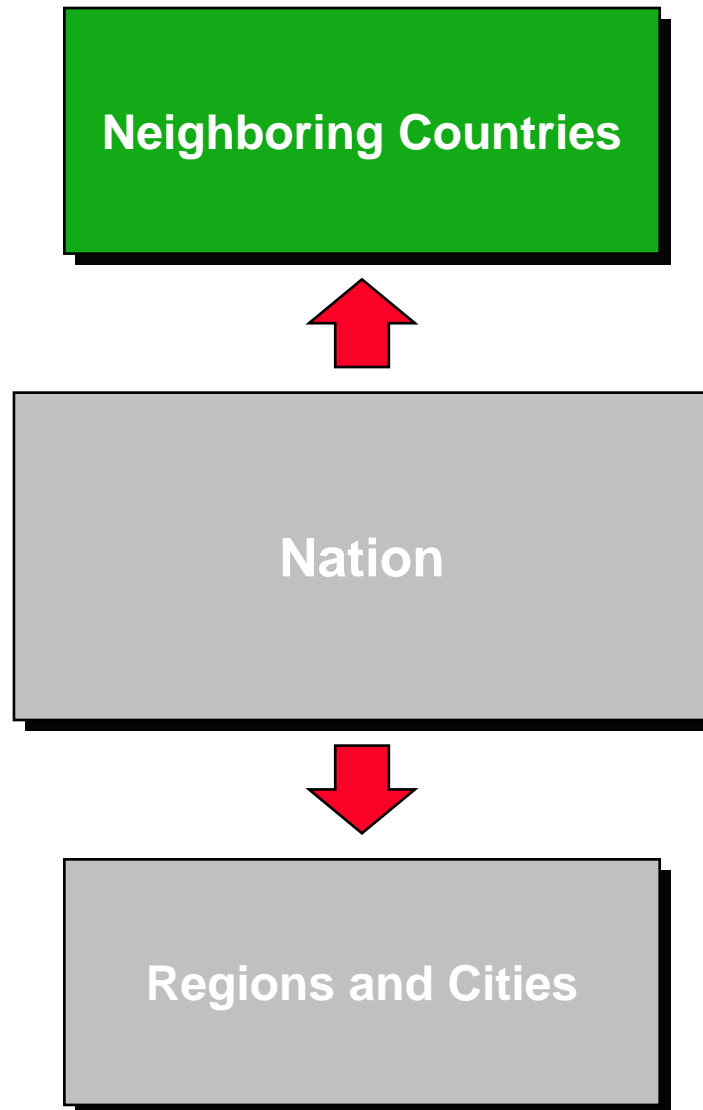
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Mexican States

Action Priorities

- Close the **productivity gap** between Northern and Southern states
- Utilize better **infrastructure** to integrate other states into the national and global economy
- Encourage internal trade and investment to facilitate **economic specialization** and increase **domestic competition**
- Develop state government capacity to improve **policy formulation** and **implementation**
- Support states in creating **distinctive state economic strategies**
- Step up efforts to reduce **corruption** at the state level

Geographic Influences on Competitiveness



Economic Coordination with Neighboring Countries



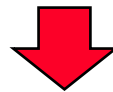
- **Economic coordination among neighboring countries** can significantly enhance competitiveness

Mexico and NAFTA

- The Mexican economy has benefited greatly from NAFTA, which has driven growth, brought in FDI, and transformed Mexico into a more **open economy**

HOWEVER

- The existing NAFTA model is **insufficient** to drive future growth
 - Maquiladora model has exhausted its capacity to generate important benefits
 - Since 1994, bilateral trade in goods and services has outstripped GDP growth
- Mexico needs to **diversify** its export and integration focus beyond the U.S.



- A shift toward a **higher productivity/innovation-based** economic model will be necessary to take NAFTA to the next level

Developing an Mexican Economic Strategy

National Value Proposition

- What is the **unique competitive position** of Mexico given its location, legacy, endowments, and potential strengths?
- What is Mexico's **value proposition for business**?
- In what **clusters** can Mexico excel?
- What role can Mexico play in its **region**?

Developing Unique Strengths

- What are the **key strengths** that Mexico must build upon?

Addressing Crucial Constraints

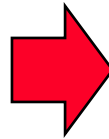
- What **weaknesses** must be addressed to achieve parity with peer countries?

- An economic strategy requires rigorous **prioritization** and **sequencing**

Toward a Mexican Economic Strategy

Unique Strengths

- Located between two oceans
- Privileged access to the United States' market, which includes large Mexican diaspora (30 million)
- Proximity to Central and South American markets
- Largest Spanish speaking market
- Young hard working population
- High level of entrepreneurship
- Large geographic area



Implications

Fight Organized Crime and Corruption

Open Competition

Next Stage Regulatory Reforms (labor, unions, energy, formalization, education, public administration)

Excellent Infrastructure Linking the Country Together and Enabling Southern Trade

Better Quality Higher Education and Training

Building Innovation Infrastructure

Foster Cluster Development

Unleash Entrepreneurship and SME Development

The Process of Economic Development

Shifting Roles and Responsibilities

Old Model

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



New Model

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

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

Organizing for Competitiveness

- Sustained improvements in competitiveness require **coordination among many parts of government**
 - **Across different ministries** to align policies
 - **Across geographic levels** of government
- Improving competitiveness requires **collaboration with the private sector**
 - Public-private dialogue to identify competitiveness priorities and implement solutions
- Mexico has created some organizations for competitiveness, but **policy coordination** between government and the private sector remains a challenge
 - Mexican Competitiveness Institute (IMCO) advances new competitiveness proposals but is positioned primarily as a think tank
 - Legislative competitiveness committees are present, but coordinate principally with the executive branch
 - Many states do not have an effective strategic plan nor engage in effective public-private dialogue

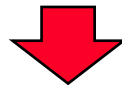
Mexico: Moving from Diagnosis to Action

Organizing for Competitiveness Priorities

- Strong **private sector leadership** is needed to address the well documented competitiveness challenges facing Mexico
- Create a private-sector led **National Council on Competitiveness** to build consensus on an overall economic strategy and track implementation
 - Public sector and academia participation is critical in order to develop effective national policy and coordinate implementation
- Encourage creation of **State Competitiveness Councils** to drive consensus on state plans and monitor implementation
 - Involve representatives from the public, private and academic sectors as well as federal government participation

The Role of the Private Sector in Economic Development

- A company's competitive advantage depends heavily on the **quality of the business environment**
- A company gains advantages from being part of a **cluster**
- Companies have a strong **role to play** in upgrading their business environment

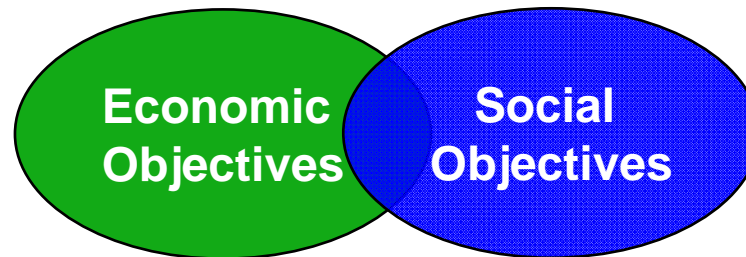


- Take an **active role** in upgrading the local infrastructure
- Nurture **local suppliers** and attract foreign suppliers
- Work closely with local **educational and research institutions**, to upgrade their **quality and create specialized programs addressing the cluster's needs**
- Inform government 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 if many companies are united
 - Cost sharing between members

Integrating Strategy and Society



- There is an **inevitable link** between a business and society
- The **health of a society** depends on having competitive companies that can create wealth and support high wages
- The **competitiveness of companies** depends on the health of the surrounding community
 - E.g., educated and skilled employees
 - Safe working conditions
 - A transparent, corruption-free business environment
 - A sense of equal opportunity
 - Low levels of environmental degradation (productive use of physical resources)
- Companies can positively affect many **social** issues



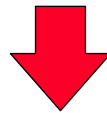
- There is a long-term **synergy** between economic and social objectives

Creating a Social Dimension of Strategy

- Company strategy in Mexico should have a **social dimension**
 - Customers value **social performance**, not just economic performance
- Companies should address those social issues where they can create **shared value**

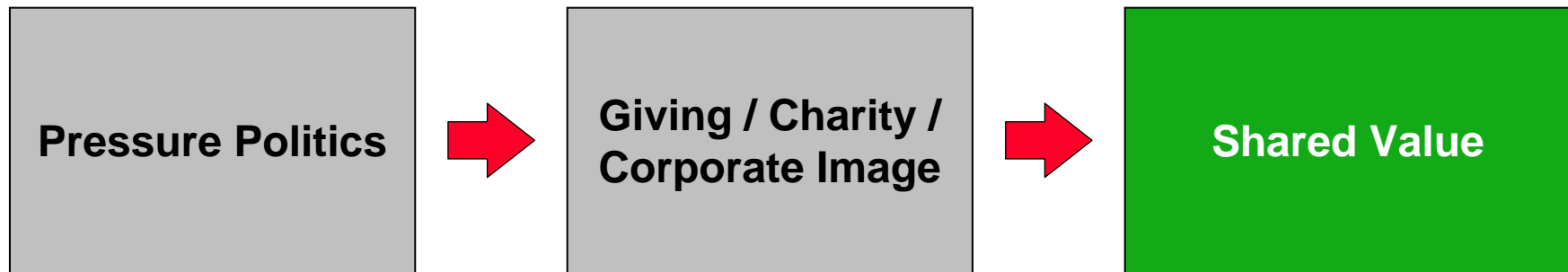
Shared value: benefit society while enhancing the long-term competitiveness of the company

- Companies can have the greatest social impact in areas **tightly connected to their business**



- Companies should incorporate a **social dimension to their value proposition**
- This social dimension can be **more sustainable** than conventional cost and quality advantages

Strategic CSR



- Points of conflict



- Create mutual interest

- Branding / PR



- Achieve social impact / results

- Obligation / charity



- Integrate strategy and society

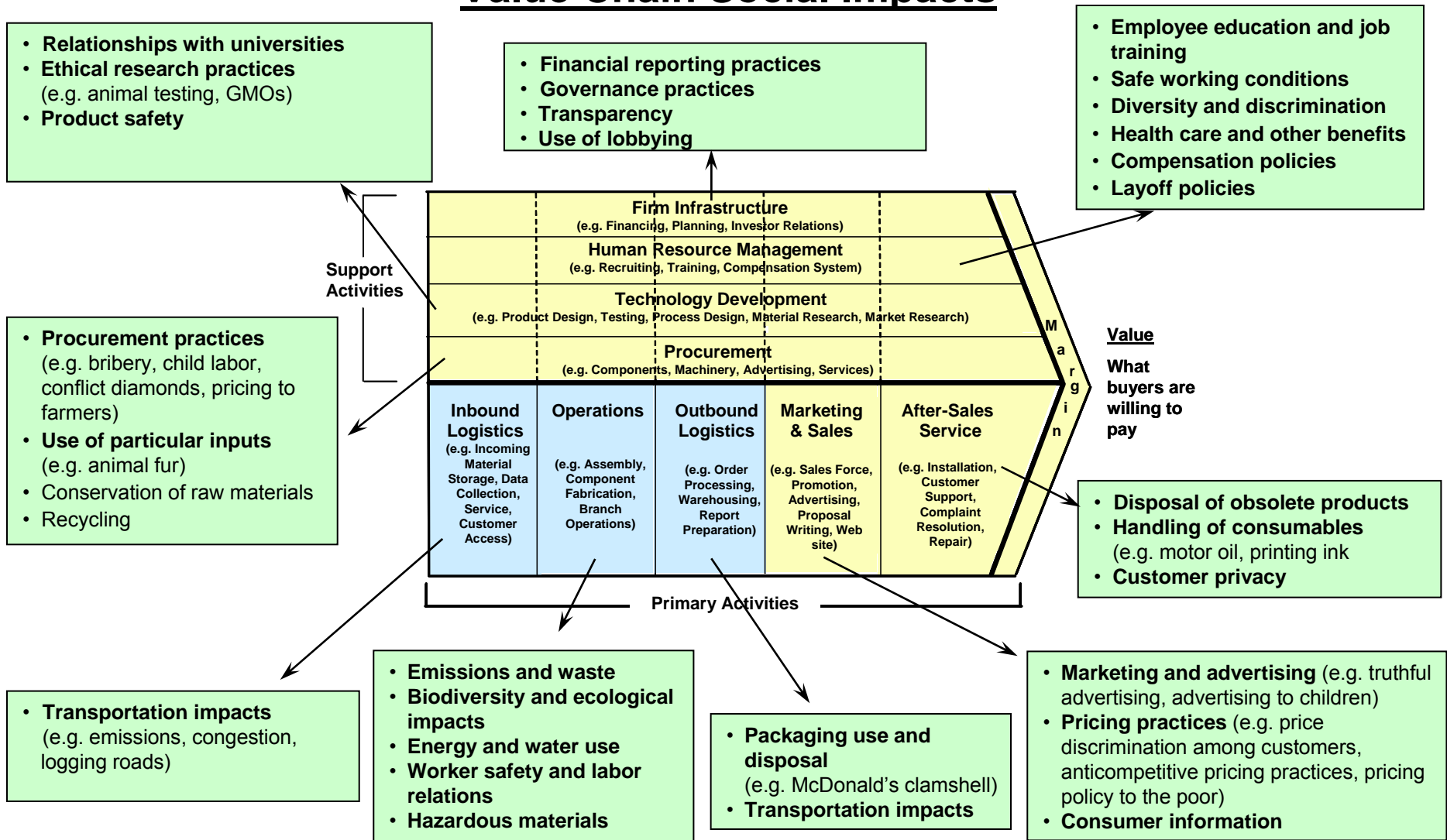
- Proliferation of causes and projects



- Focus on strategic impact

Inside-Out Links with Society

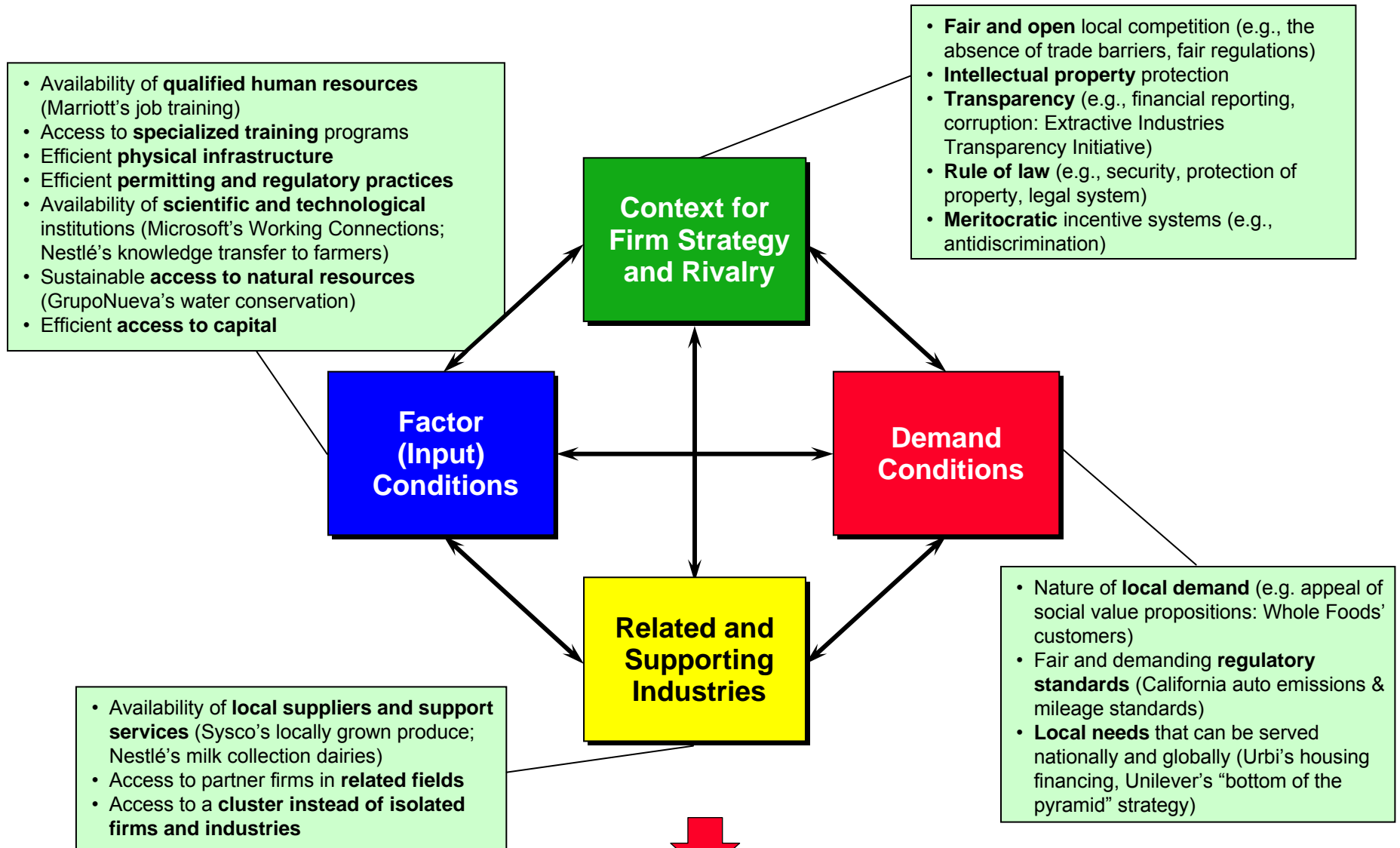
Value Chain Social Impacts



- Every activity in the value chain touches on communities in the locations where a company operates. These impacts can be **positive** or **negative**.

Identifying Shared Value

Outside-In Social Impact on the Company



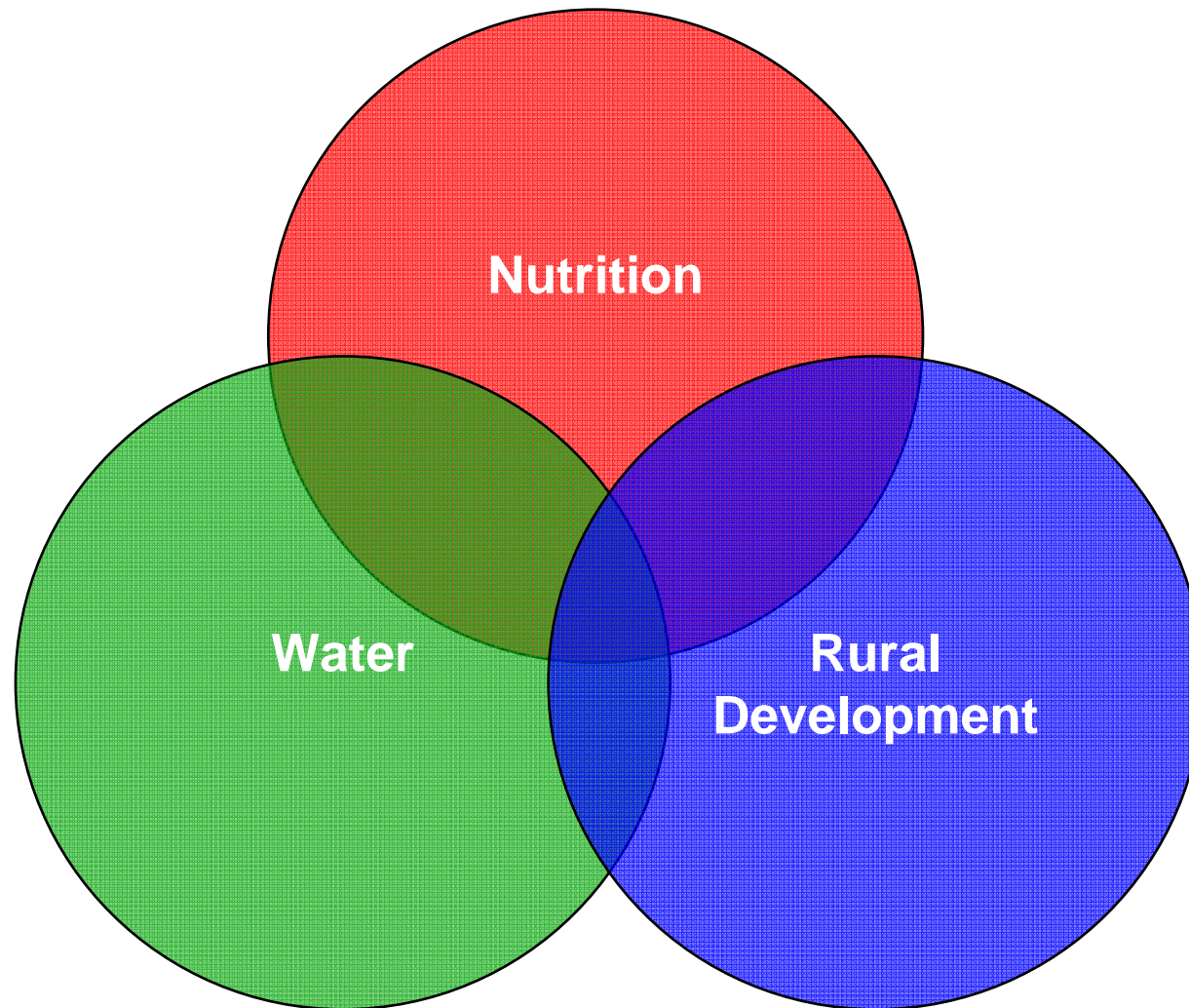
- Competitive context is often influenced by or inextricably linked with **social conditions**

Mitigating Negative Value Chain Impacts

- **Measure** social impacts whenever possible
- Identify **best practices** in limiting harm across the value chain
- Make performance in social impacts of activities a responsibility of **operating units**


Creating Shared Value

Nestlé



Corporate Role in Economic Development

Nestlé in India

- Nestlé's history in the Moga region of India begins in 1962, when the region was in **severe poverty**
 - Local milk supply was hampered by small parcels of land, poor soil, periodic droughts, animal disease, and lack of a commercial market
 - Nestlé established local milk purchasing organizations in each town
 - Nestlé invested in improving competitive context
 - Collection infrastructure such as refrigerated dairies was accompanied by veterinarians, nutritionists, agronomists, and quality assurance experts to assist small farmers
 - Medicines and nutritional supplements were provided to improve animal health
 - Monthly training sessions were held for local farmers
 - Wells to secure water supply for animals were dug with financing and technical assistance from Nestlé
 - Nestlé has built a productive **milk cluster** in Moga, and buys milk from more than 75,000 farmers in the region through 650 dairies in local villages
- 
- Moga has advanced its economic development versus other nearby regions
 - Nestlé has developed a **long-term competitive advantage** in the milk cluster in numerous developing countries

Strategy in Economic Downturns

- Create a **positive** agenda
 - Refocus on **strategy**
 - Return to **economic fundamentals**
 - Downsize **to a strategy**, not across the board
 - **Do not overreact** to distressed industry conditions
 - Use the downturn to **get things done** that would be more difficult in normal times
 - Position for **long term economic performance**, not near term stock price
 - Seize opportunities for **discontinuities** which are more likely to emerge
- 
- Strategy is **more important** in downturns, not less