Creating A Competitive South Africa

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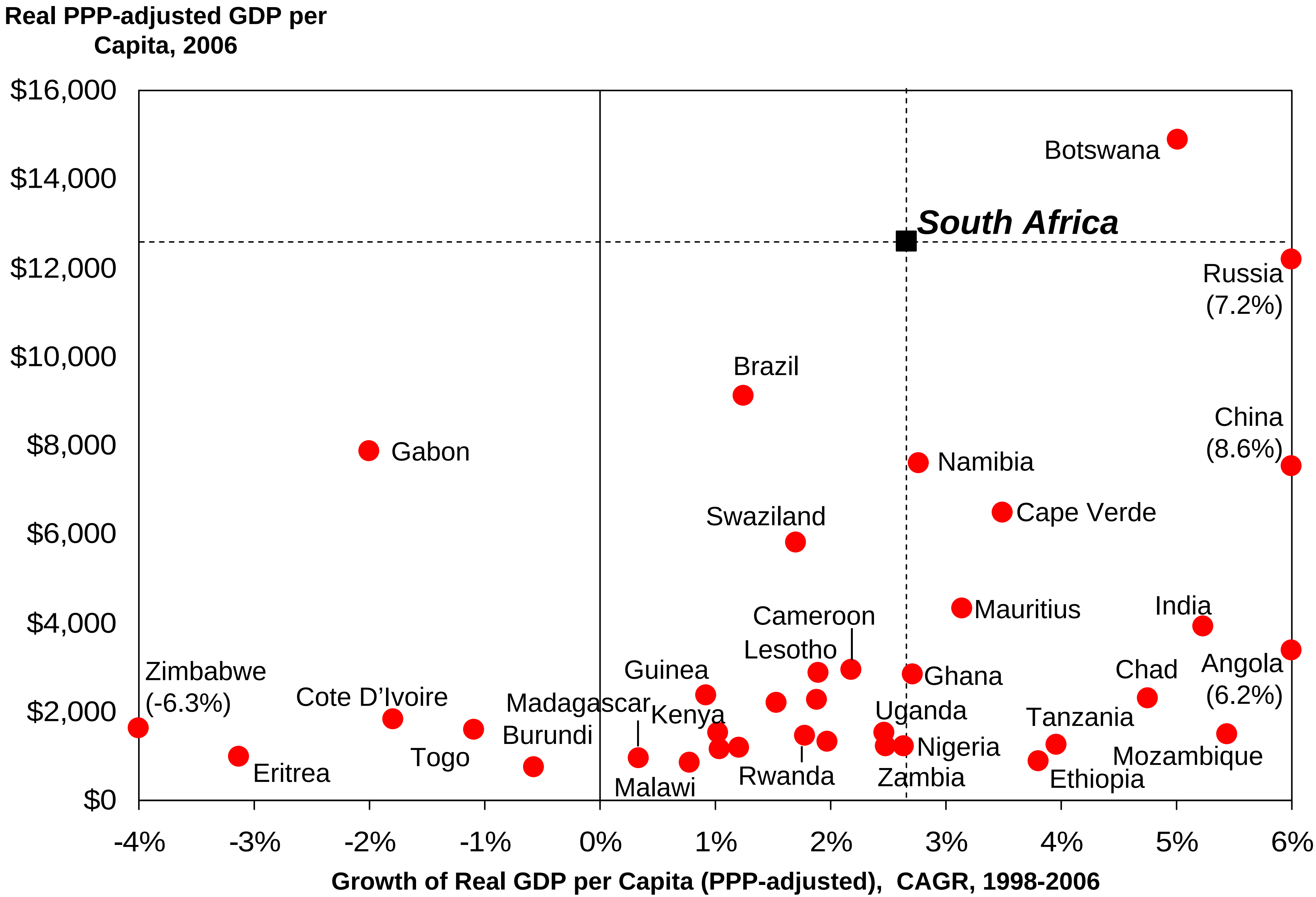
The Changing Nature of International Competition

Drivers	• Fewer barriers to trade and investment • Rapidly increasing stock and diffusion of knowledge • Competitiveness upgrading in many countries
Market reaction	• Globalization of markets • Globalization of capital investment • Globalization of value chains • Increasing knowledge and skill intensity of competition • Value migrating to the service component of the value chain

- Improving competitiveness is **increasingly essential** to South Africa's prosperity

Prosperity Performance

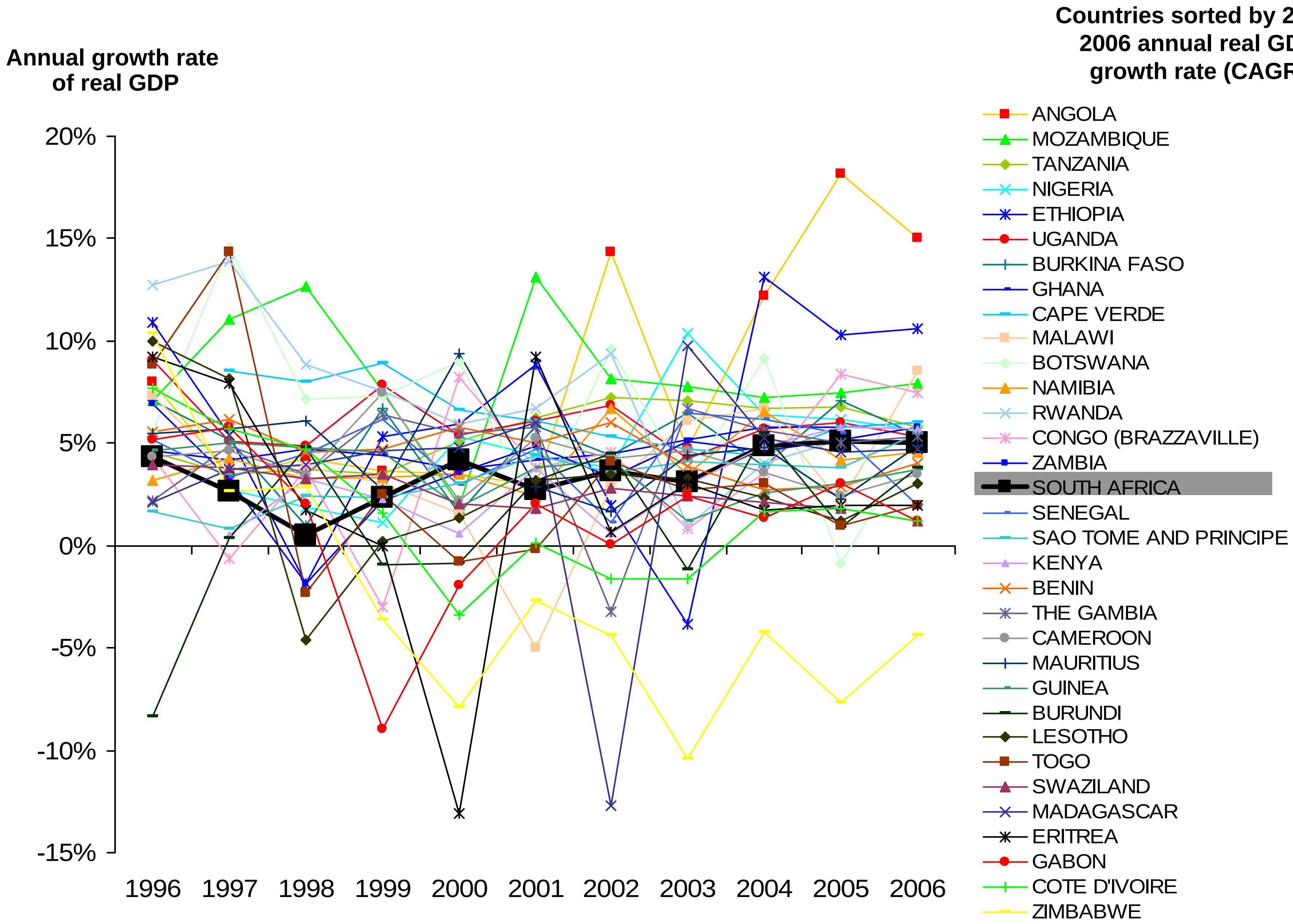
Selected Countries



Source: EIU (2007)

Comparative Economic Performance

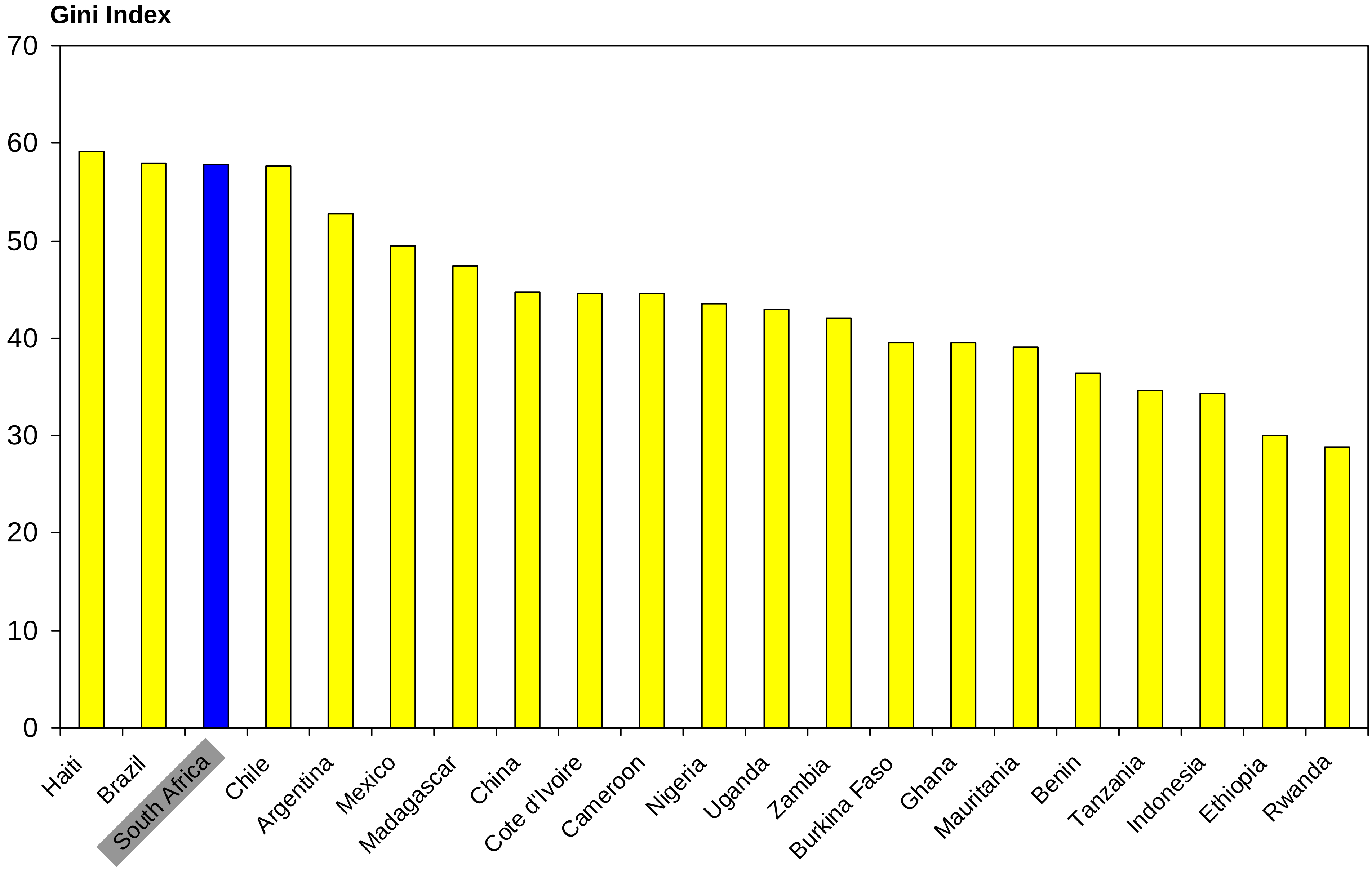
Real GDP Growth Rates



Source: EIU (2007)

Income Inequality

Selected Countries



Note: Most recent Gini index data available for each country (1999 – 2003). South Africa's data is from 2000.

Source: World Bank, World Development Indicators, 2007.

South African Economy 2007

- Economic growth rates are **solid** and have reached a higher path since 2003, driven increasingly by domestic demand
- A combination of **domestic policies** and supportive conditions in the **global economy** have driven growth

However

- Growth rates have **not been exceptional** compared to other middle income and natural resource-rich countries
- Domestic demand growth is threatening to create **unsustainable external balances**; export capacity needs to broaden and grow
- Unemployment, inequality, and the **social tensions** they create recede only slowly

- Is South Africa **improving competitiveness fast enough** to avoid the risk of macroeconomic and political instability?

What is Competitiveness?

- Competitiveness is determined by the **productivity** (value per unit of input) with which a nation uses its human, capital, and natural resources.
  - Productivity sets a the standard of living (wages, returns on capital, returns on natural resources) that a nation can sustain
  - Productivity depends on the **prices** that a nation's products and services command (e.g. uniqueness, quality), not just on **efficiency**
  - It is not **what** industries a nation competes in that matters for prosperity, but **how** it competes in those industries
  - Productivity requires a **combination of domestic and foreign firms** operating in the nation
  - The productivity of **"local" or domestic** industries is fundamental to competitiveness, not just that of traded industries
  - Devaluation does **not** make a country more competitive

- Only **business** can create wealth
- 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

Decomposing Prosperity

Prosperity

- Standard of living
- Inequality

Domestic Purchasing Power

- Consumption taxes
- Local prices
  - Efficiency of local industries
  - Level of local market competition

Per Capita Income

Labor Productivity

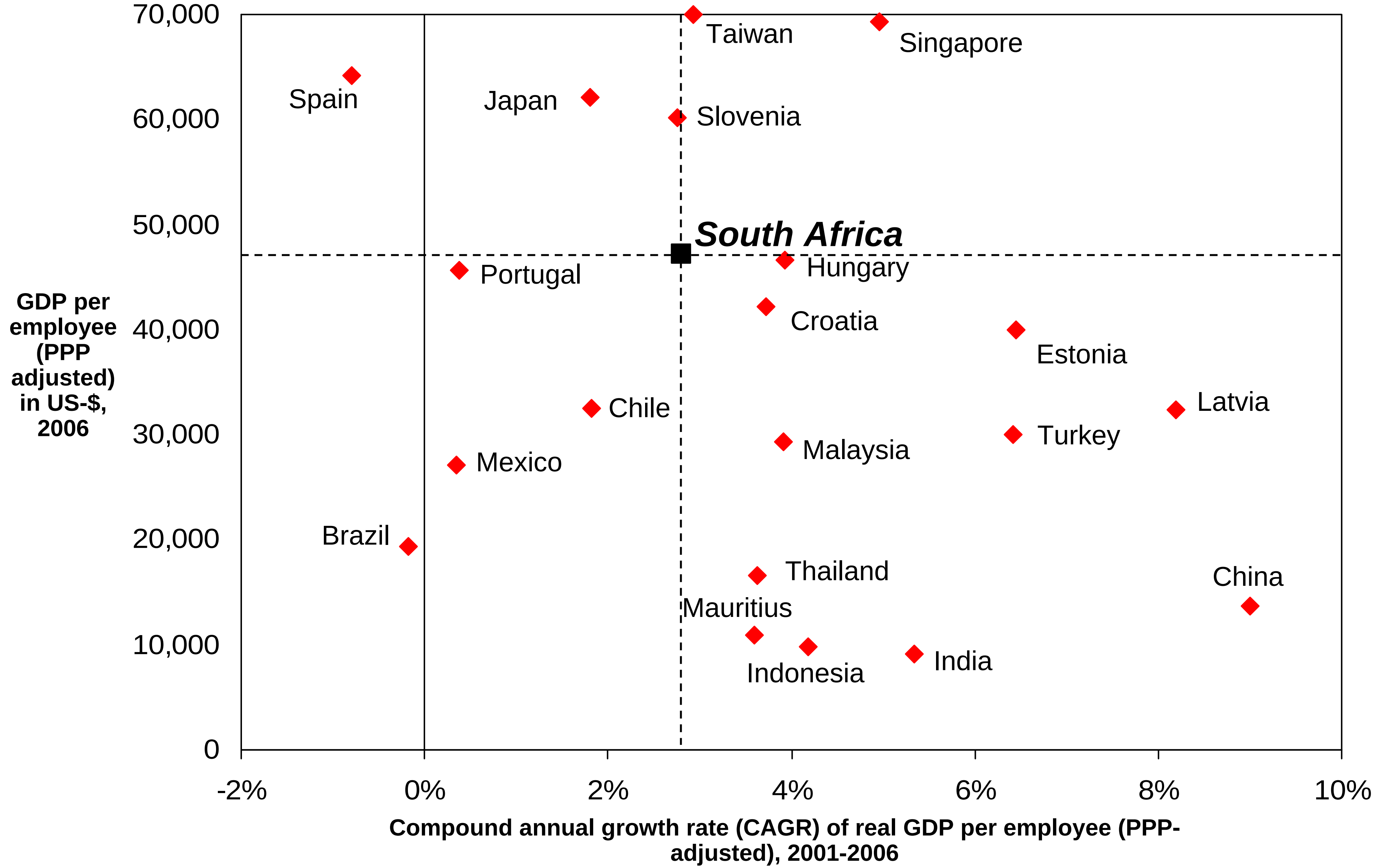
- Skills
- Capital stock
- Total factor productivity

Labor Utilization

- Working hours
- Unemployment
- Workforce participation rate
  - Population age profile

Comparative Labor Productivity Performance

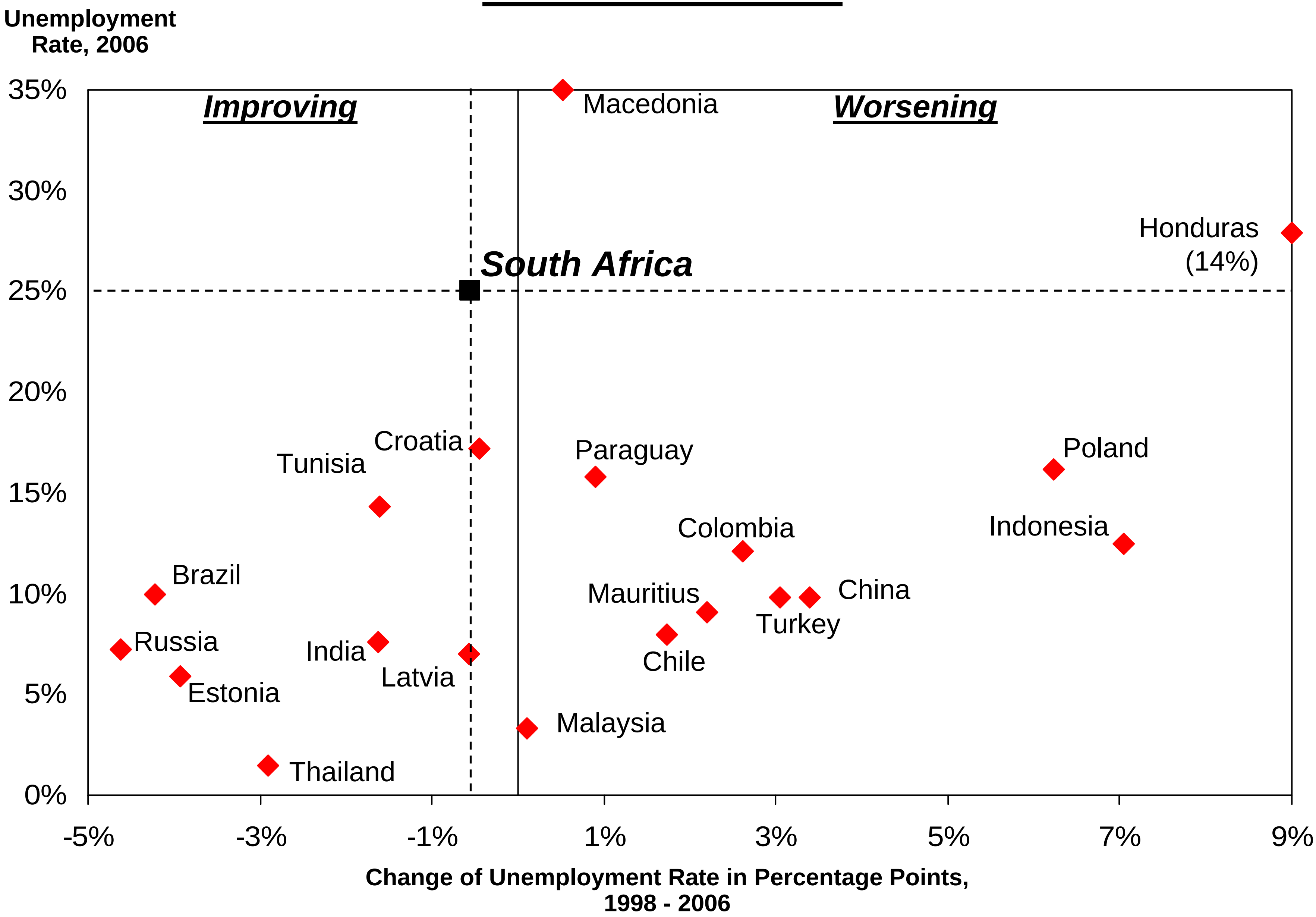
Selected Developing Countries



Source: EIU (2007)

Unemployment Performance

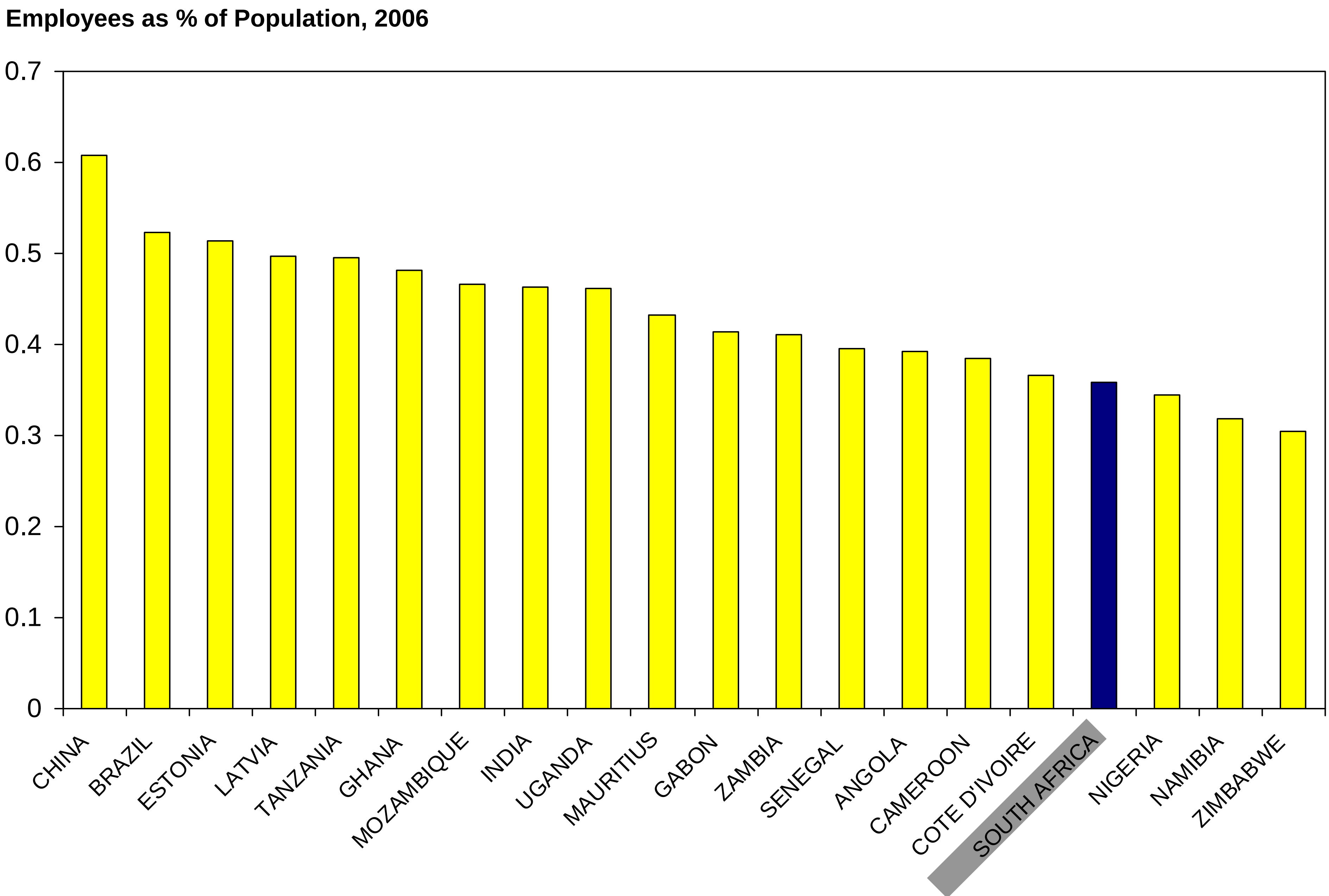
Selected Countries



Source: EIU (2007)

Labor Force Mobilization

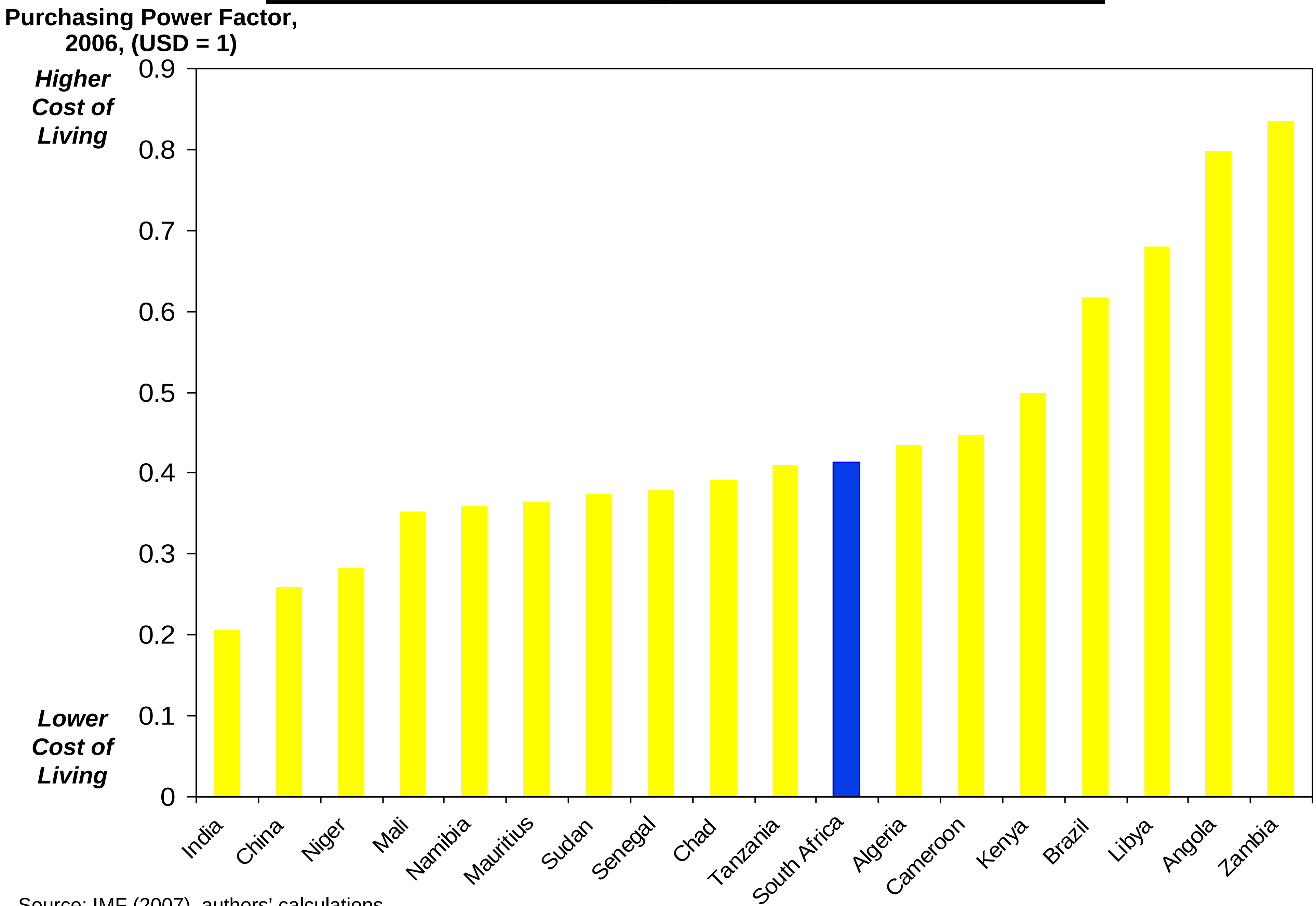
Selected Countries



Source: EIU, 2007

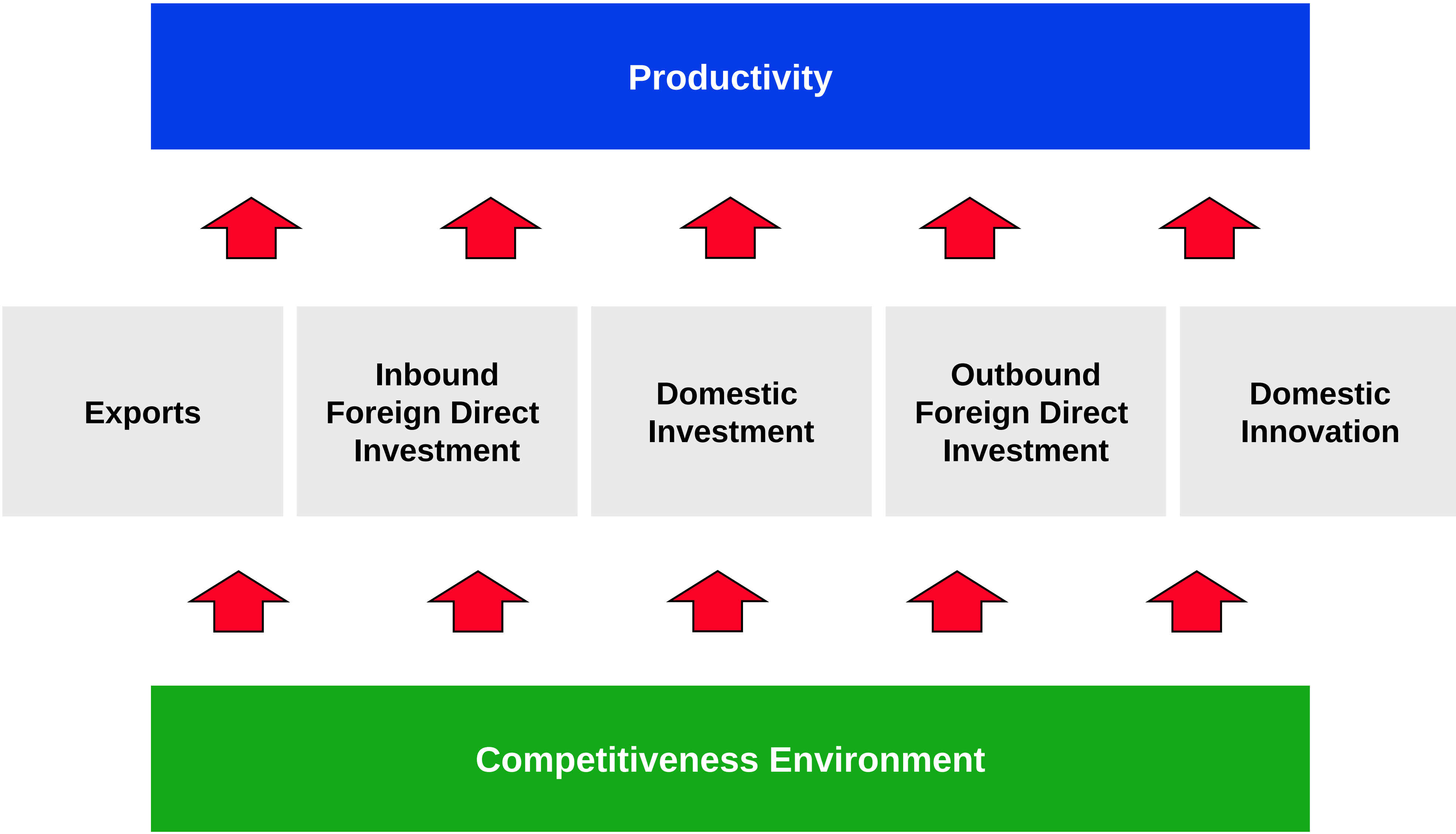
Domestic Purchasing Power

Normalized Purchasing Power Across Countries



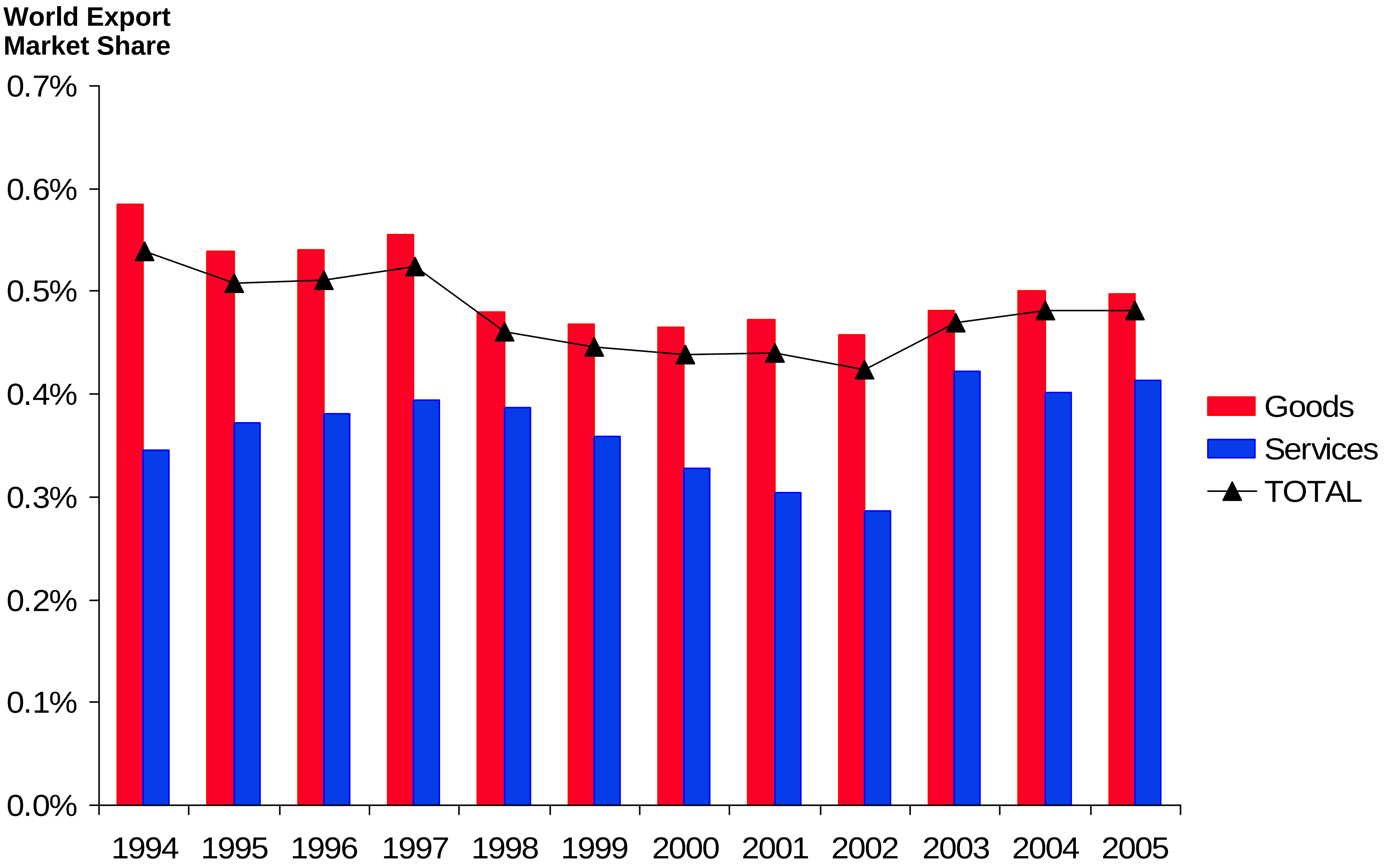
Source: IMF (2007), authors' calculations

Enablers and Indicators of Competitiveness



South African Export Performance

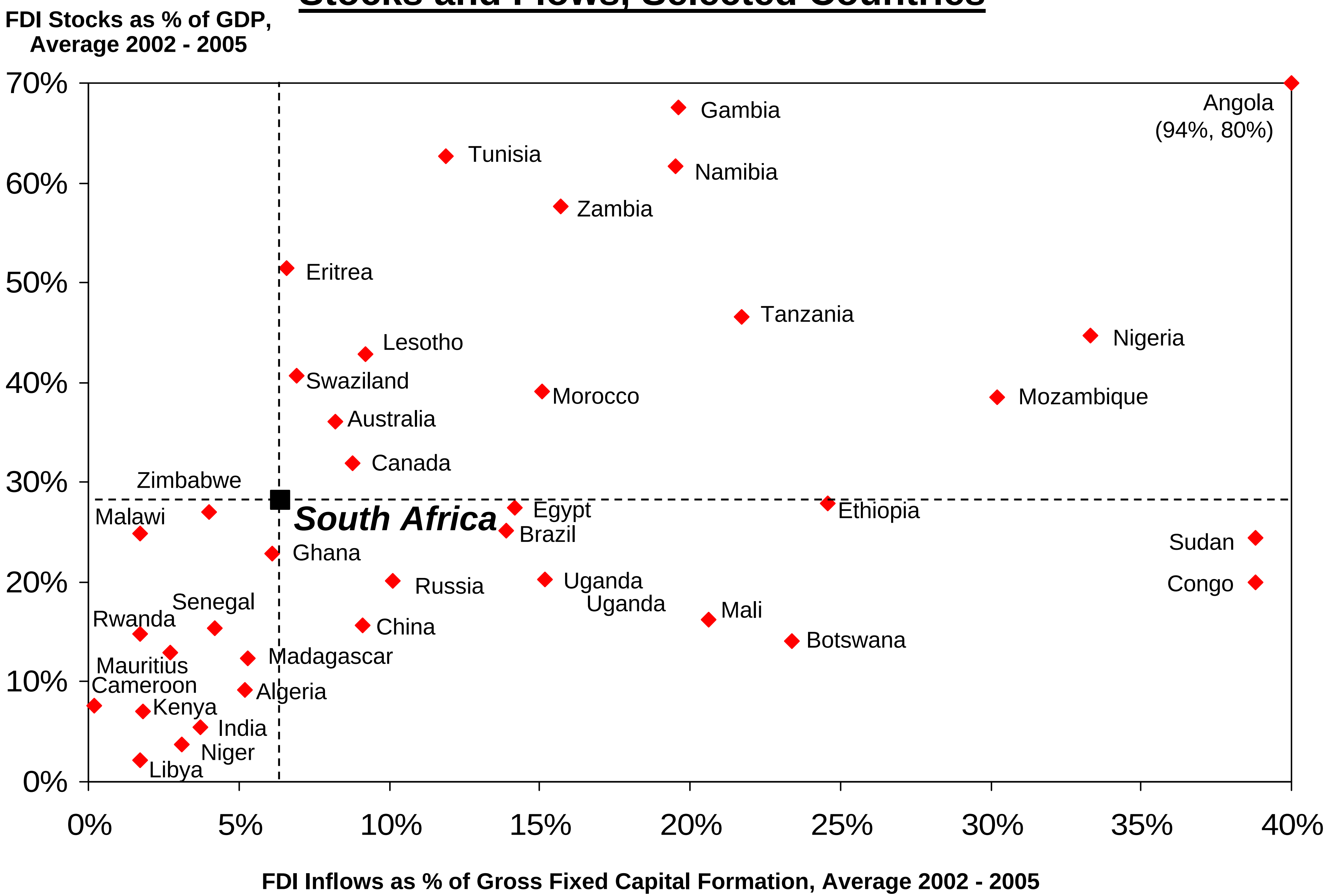
1994 - 2005



Source: WTO (2007)

Inbound Foreign Investment Performance

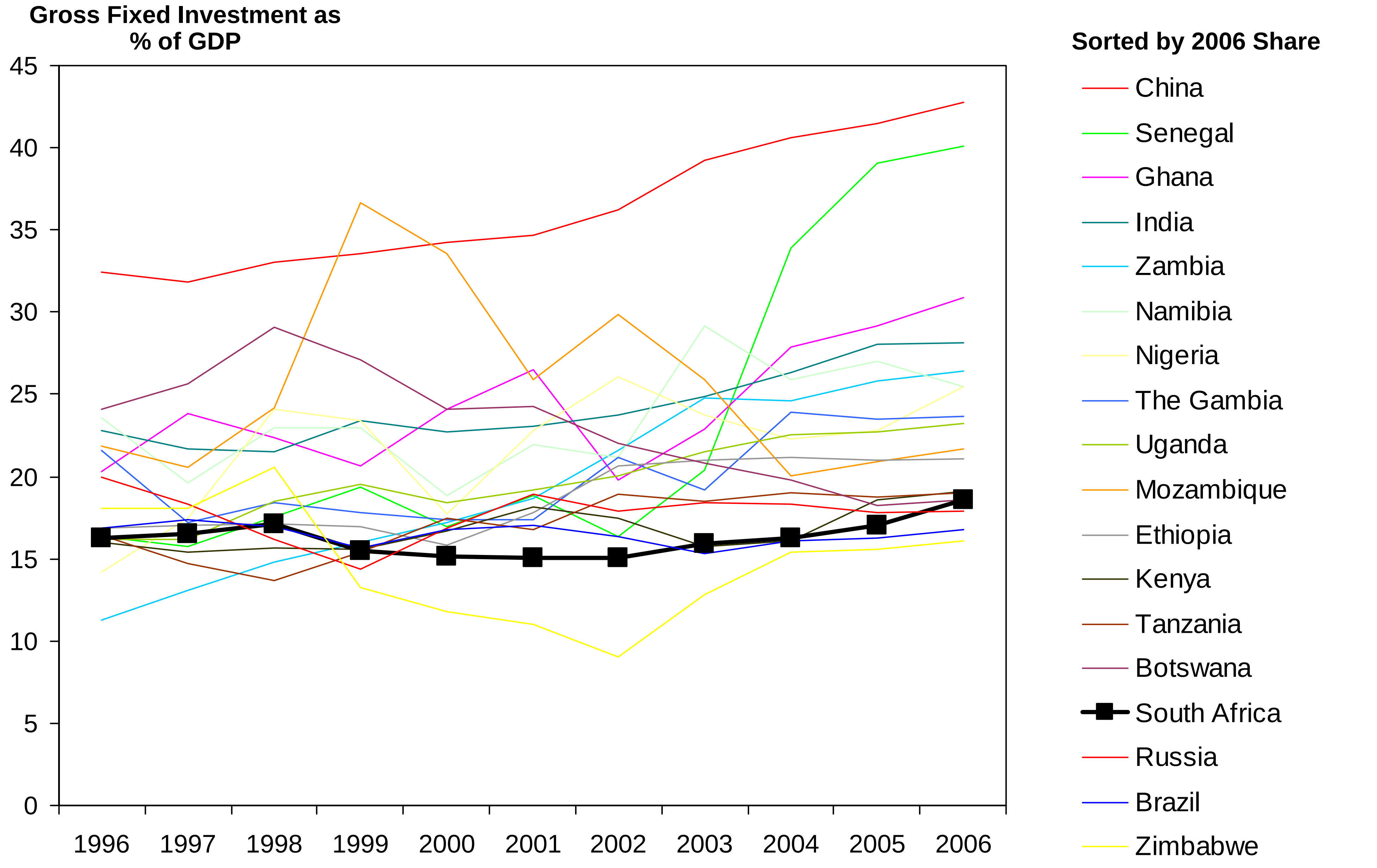
Stocks and Flows, Selected Countries



Source: UNCTAD (2007)

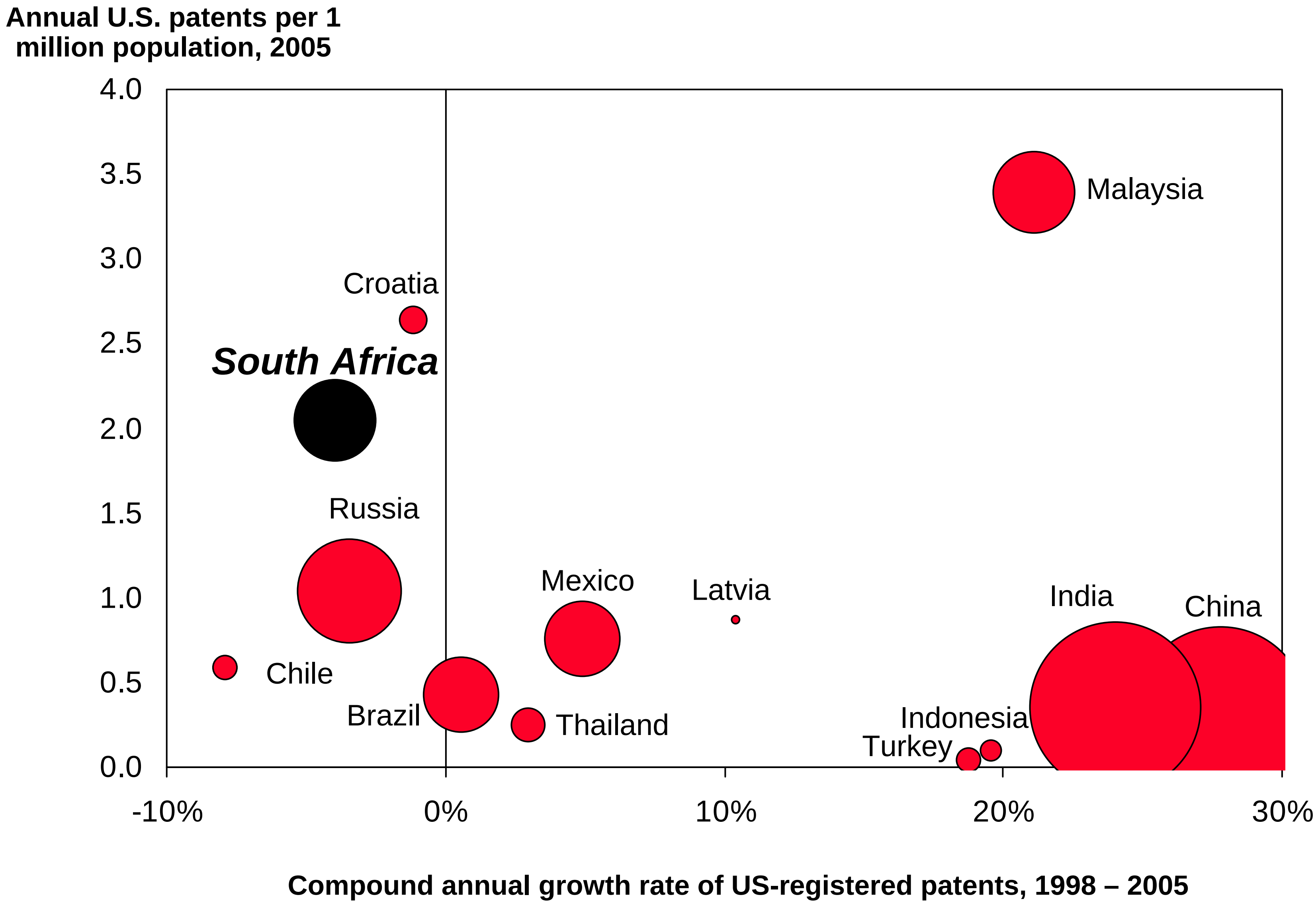
Fixed Investment Rates

Selected Countries



Source: EIU, 2007.

International Patenting Output
Selected Countries



Source: USPTO, 2006

South Africa's Economic Performance

Core components of prosperity

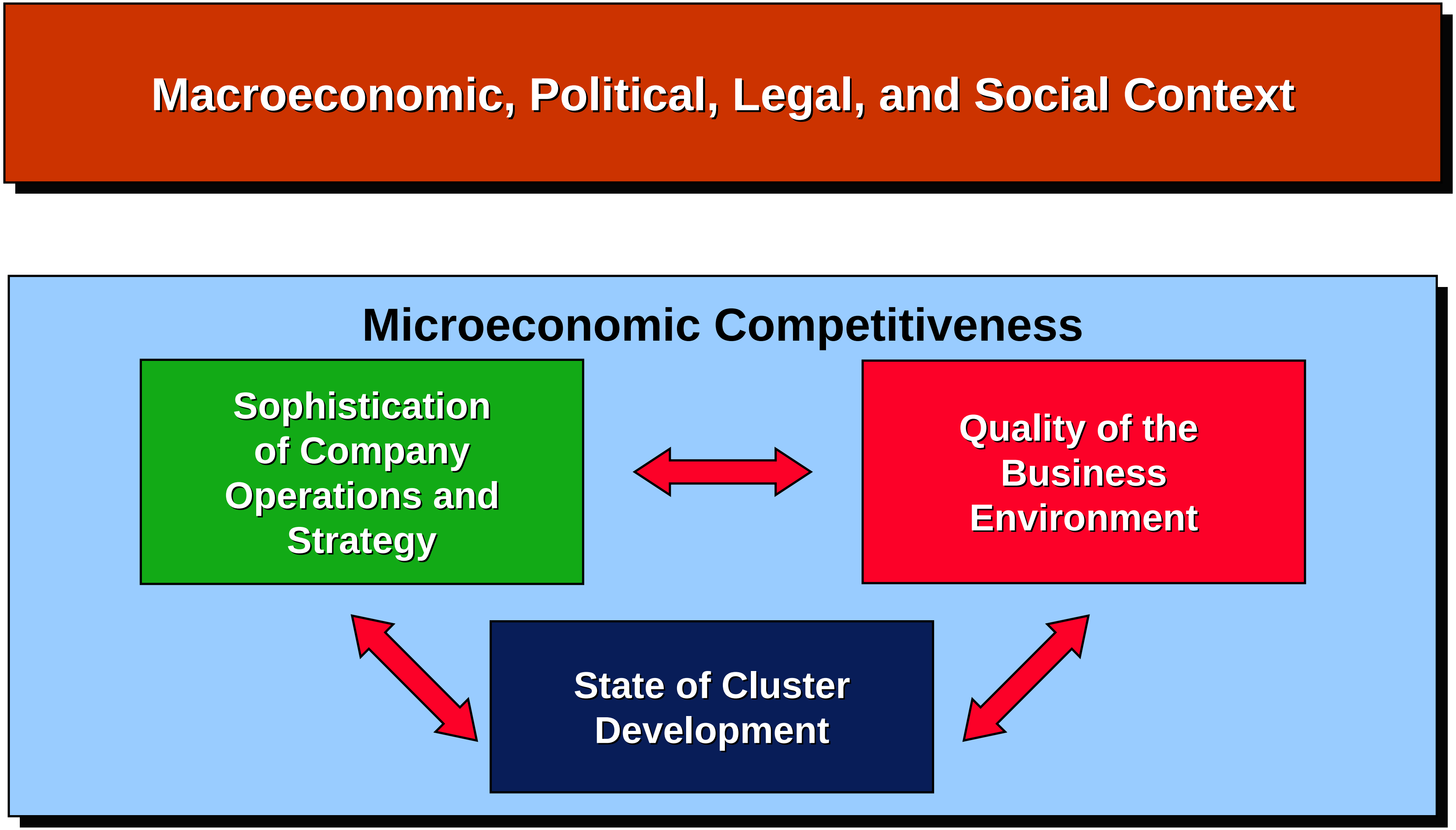
- **Productivity** is comparable versus peers but growing less dynamically
- The **mobilization of the working age population** remains dramatically lower
- **Labor mobilization** is becoming more crucial for future prosperity growth, but job creation still lags the growth of the available labor force

Indicators and enablers of competitiveness

- South Africa's **export share** has been flat, despite the country's focus on growing natural resource-driven clusters
- **Inward foreign direct investment** has increased in recent years, but South Africa still remains well below its potential
- **Domestic investment** is increasing, but continues to fall short of peer countries and the benchmark set by the government
- **Innovation output** is falling behind peer countries

- South Africa continues to suffer from a **'two-economy phenomena'**
  - A formal economy with relatively solid productivity close to global standards
  - An informal economy with low productivity that provides jobs for a large share of the population, especially the poor

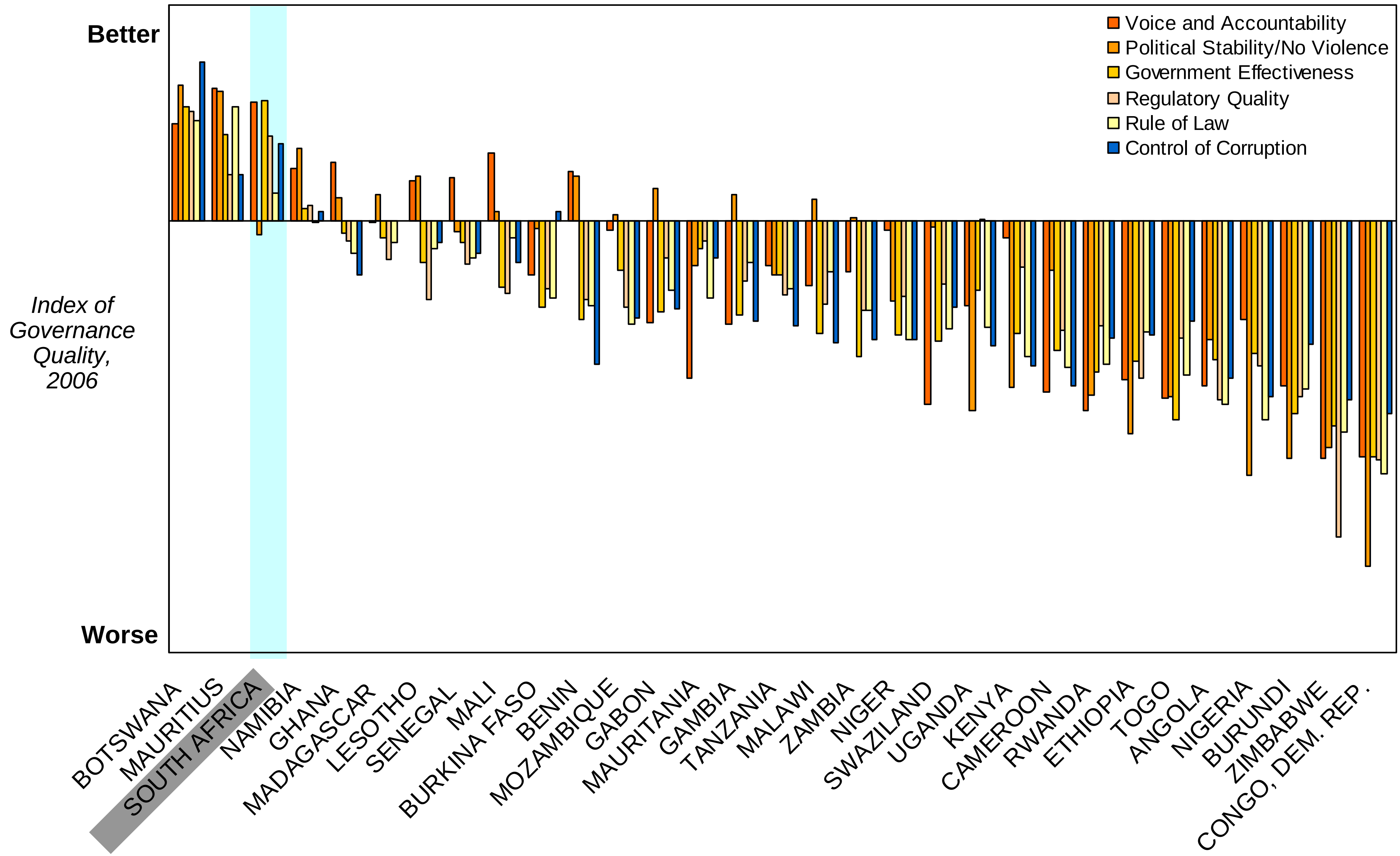
Determinants of Competitiveness



- A sound 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**

Governance Indicators

Selected Countries



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 (2007)

Prosperity and Human Development

Selected Countries

Country	Rank		HDI components		
	GDP per Capita (PPP)	Human Development Index (HDI)	Life Expectancy	Education	GDP per Capita (PPP)
South Africa	**55**	**121**	**37%**	**80%**	**79%**
Botswana	58	131	16%	78%	77%
Russian Federation	59	65	67%	95%	77%
Brazil	64	69	76%	88%	74%
Thailand	65	74	75%	86%	73%
Tunisia	69	87	81%	75%	73%
Turkey	70	92	73%	81%	73%
Libyan Arab Jamahiriya	71	64	81%	86%	72%
Iran, Islamic Rep. of	72	96	76%	75%	72%
Kazakhstan	74	79	64%	96%	72%
Namibia	75	125	37%	79%	72%
Gabon	81	124	48%	71%	70%
Algeria	83	102	77%	71%	70%
Venezuela	89	72	80%	87%	68%
China	90	81	78%	84%	68%
Indonesia	116	108	70%	83%	60%
India	117	126	64%	61%	58%
Ghana	127	136	53%	54%	52%
Cameroon	131	144	34%	66%	51%
Uganda	152	145	39%	67%	45%
Congo	165	140	46%	72%	38%

Note: Percentages are relative to best country in the world
Source: UNDP (2006)

Improving the Business Environment: The Diamond

Context for Firm Strategy and Rivalry

- A local context and rules that encourage **investment** and **productivity**
  - –e.g., Intellectual property protection
- **Meritocratic** incentive systems in businesses and other institutions
- Open and vigorous **local competition**
  - –e.g., Anti-monopoly laws, openness to imports

Factor (Input) Conditions

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

Demand Conditions

- **Local demand** with **improving sophistication**
- Local customer needs that **anticipate** those elsewhere
- Unusual local demand in **specialized segments** that can be served nationally and globally

Related and Supporting Industries

- Access to capable, locally based **suppliers** and firms in **related fields**

- Successful economic development is a process of **successive upgrading**, in which the business environment improves to enable increasingly sophisticated ways of competing

Factor (Input) Conditions

Factor (Input) Conditions

South Africa's Relative Position 2006

Competitive Advantages Relative to GDP per Capita

Country Ranking, Arrows indicate a change of 5 or more ranks since 2001

Local equity market access	12
Efficiency of legal framework	16
Financial market sophistication	18
University/industry research collaboration	22
Quality of management schools	22
Judicial independence	22
Air transport infrastructure quality	24
Quality of scientific research institutions	25

Competitive Disadvantages Relative to GDP per Capita

Country Ranking, Arrows indicate a change of 5 or more ranks since 2001

Quality of math and science education	119	
Availability of scientists and engineers	96	
Quality of public schools	89	↓
Reliability of police services	86	↑
Telephone/fax infrastructure quality	83	↓
Quality of electricity supply	68	↓
Port infrastructure quality	43	↓
Overall infrastructure quality	41	↓
Railroad infrastructure development	40	↓
Ease of access to loans	37	
Venture capital availability	35	

Note: Rank versus 121 countries; overall, South Africa ranks 33rd in 2005 PPP adjusted GDP per capita and 46th in Business Competitiveness.

Source: Global Competitiveness Report 2006-2007.

Weaknesses in South Africa's Labor Market

- South Africa continues to struggle with **high unemployment** and a significant **informal economy**

- **Skill shortages** are a clear reason for the persistent unemployment; a large share of the unemployed are low-skilled long-term unemployed
- Labor market **rules and regulations** are major causes of low job creation in the economy
  - Hiring and firing rules and work procedures are comparable to peer countries; especially after the 2002 modifications to the legislation of the initial post-apartheid period
  - Wage policies, which set unrealistically high minimum wages and uneconomic wage structures within industries, are a serious barrier

- Rising unit labor costs, despite persistently high unemployment, is a sign of clear **structural problems** in South Africa's labor market

Context for Firm Strategy and Rivalry

Context for Strategy and Rivalry

South Africa's Relative Position 2006

Competitive Advantages Relative to GDP per Capita

Country Ranking, Arrows indicate a change of 5 or more ranks since 2001

Efficacy of corporate boards	8	
Effectiveness of antitrust policy	19	⇧
Intellectual property protection	23	
Business costs of corruption	33	
Decentralization of corporate activity	34	⇧
Intensity of local competition	35	⬇

Competitive Disadvantages Relative to GDP per Capita

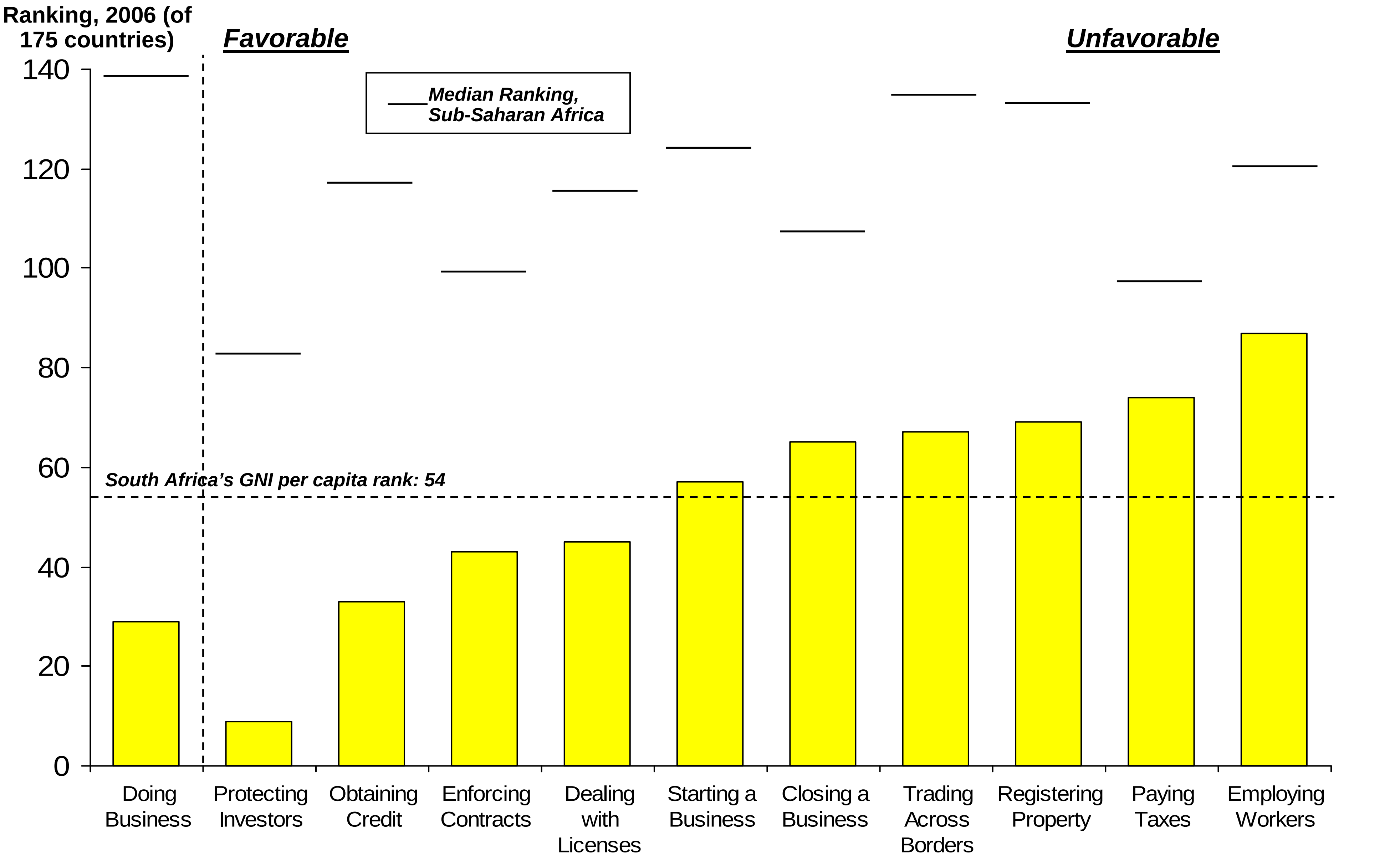
Country Ranking, Arrows indicate a change of 5 or more ranks since 2001

Cooperation in labor-employer relations	107	⬇
Centralization of economic policymaking	79	⬇
Favoritism in decisions of government officials	48	⇧
Prevalence of trade barriers	38	

Note: Rank versus 121 countries; overall, South Africa ranks 33rd in 2005 PPP adjusted GDP per capita and 46th in Business Competitiveness.
Source: Global Competitiveness Report 2006-2007.

Ease of Doing Business

South Africa



Source: World Bank Doing Business (2007)

Demand Conditions

Demand Conditions

South Africa's Relative Position 2006

Competitive Advantages Relative to GDP per Capita

Country Ranking, Arrows indicate a change of 5 or more ranks since 2001

Laws relating to ICT	26	⇧
Stringency of environmental regulations	32	
Government procurement advanced technology products	32	⇧
Presence of demanding regulatory standards	34	
Buyer sophistication	34	

Competitive Disadvantages Relative to GDP per Capita

Note: Rank versus 121 countries; overall, South Africa ranks 33rd in 2005 PPP adjusted GDP per capita and 46th in Business Competitiveness.
Source: Global Competitiveness Report 2006-2007.

Related and Supporting Industries

Related and Supporting Industries

South Africa's Relative Position 2006

Competitive Advantages Relative to GDP per Capita	Country Ranking, Arrows indicate a change of 5 or more ranks since 2001
Local supplier quantity	23 ↓
Local supplier quality	28
Local availability of specialized research and training services	31 ↓

Competitive Disadvantages Relative to GDP per Capita	Country Ranking, Arrows indicate a change of 5 or more ranks since 2001
Local availability of process machinery	40 ↓

Note: Rank versus 121 countries; overall, South Africa ranks 33rd in 2005 PPP adjusted GDP per capita and 46th in Business Competitiveness.
Source: Global Competitiveness Report 2006-2007.

Company Operations and Strategy
South Africa's Relative Position 2006

Competitive Advantages Relative to GDP per Capita

Country Ranking, Arrows indicate a change of 5 or more ranks since 2001

Extent of incentive compensation	4	↑
Prevalence of foreign technology licensing	11	
Reliance on professional management	13	↑
Extent of regional sales	15	↑
Extent of marketing	20	
Company spending on research and development	22	
Extent of staff training	24	
Willingness to delegate authority	27	
Breadth of international markets	29	

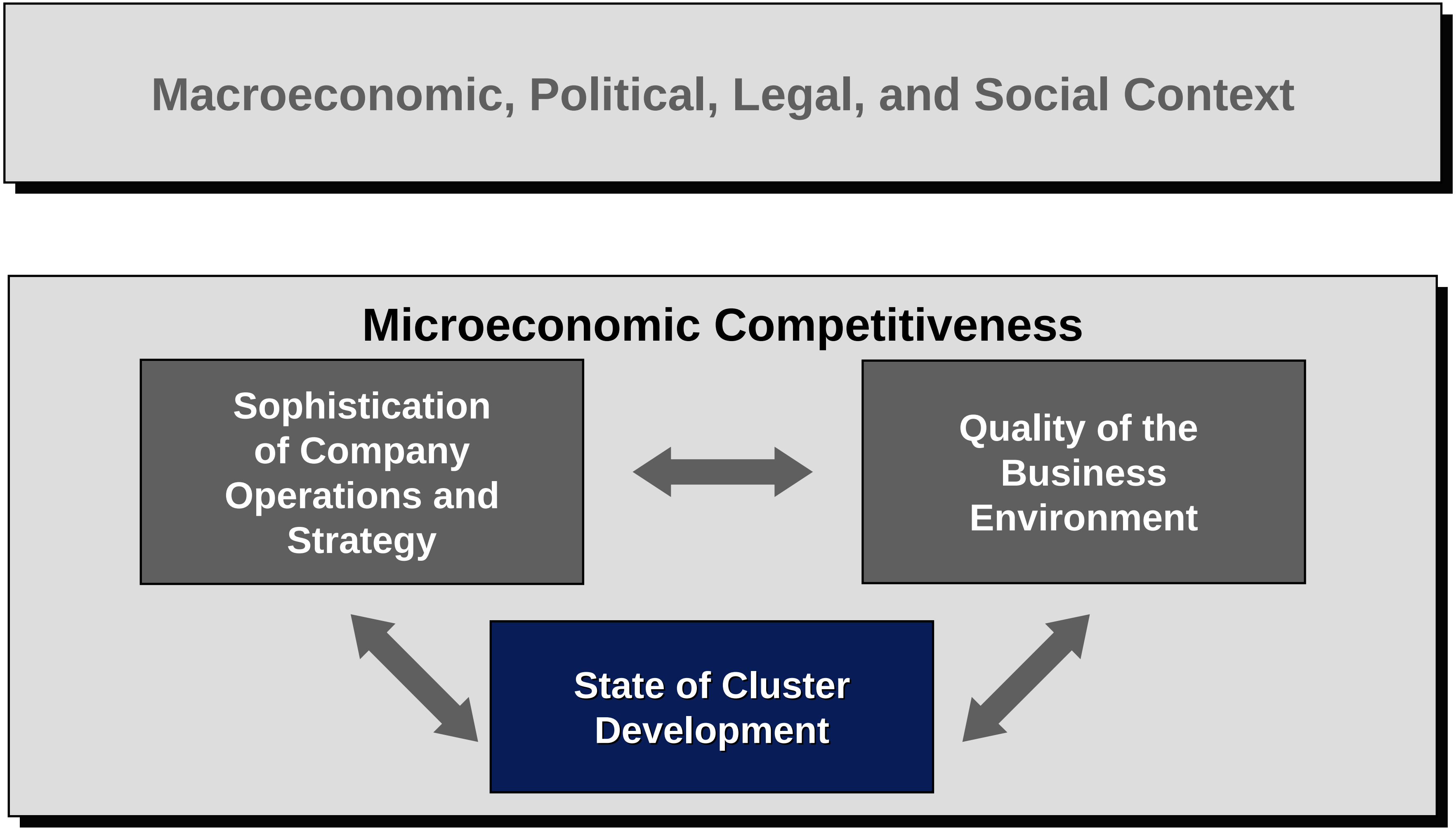
Competitive Disadvantages Relative to GDP per Capita

Country Ranking, Arrows indicate a change of 5 or more ranks since 2001

Presence across the value chain	83	↓
Nature of competitive advantage	73	↓
Degree of customer orientation	52	↑
Production process sophistication	46	↓
Control of international distribution	37	
Capacity for innovation	35	↓

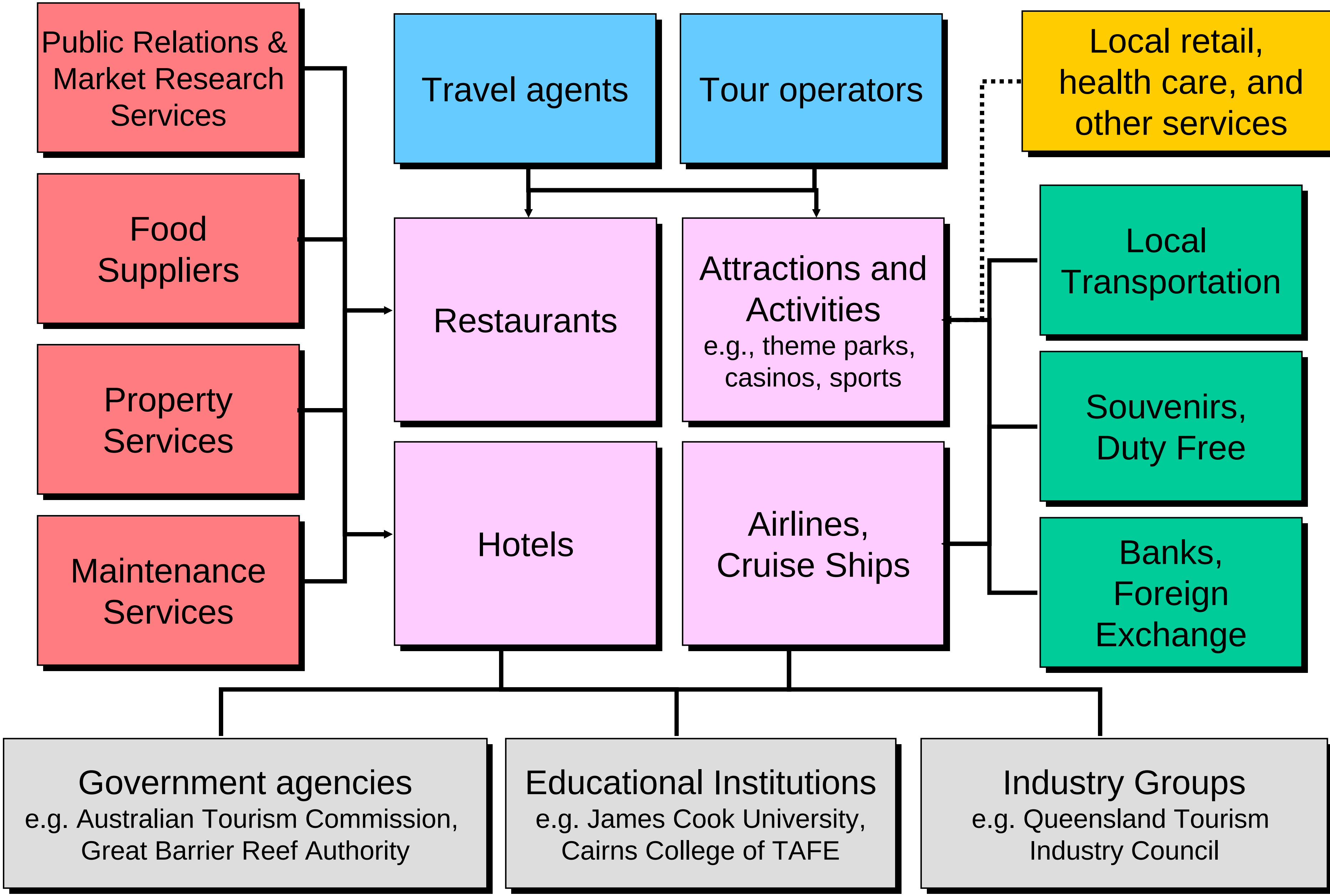
Note: Rank versus 121 countries; overall, South Africa ranks 33rd in 2005 PPP adjusted GDP per capita and 46th in Business Competitiveness.
Source: Global Competitiveness Report 2006-2007.

Determinants of Competitiveness



Enhancing Cluster Development

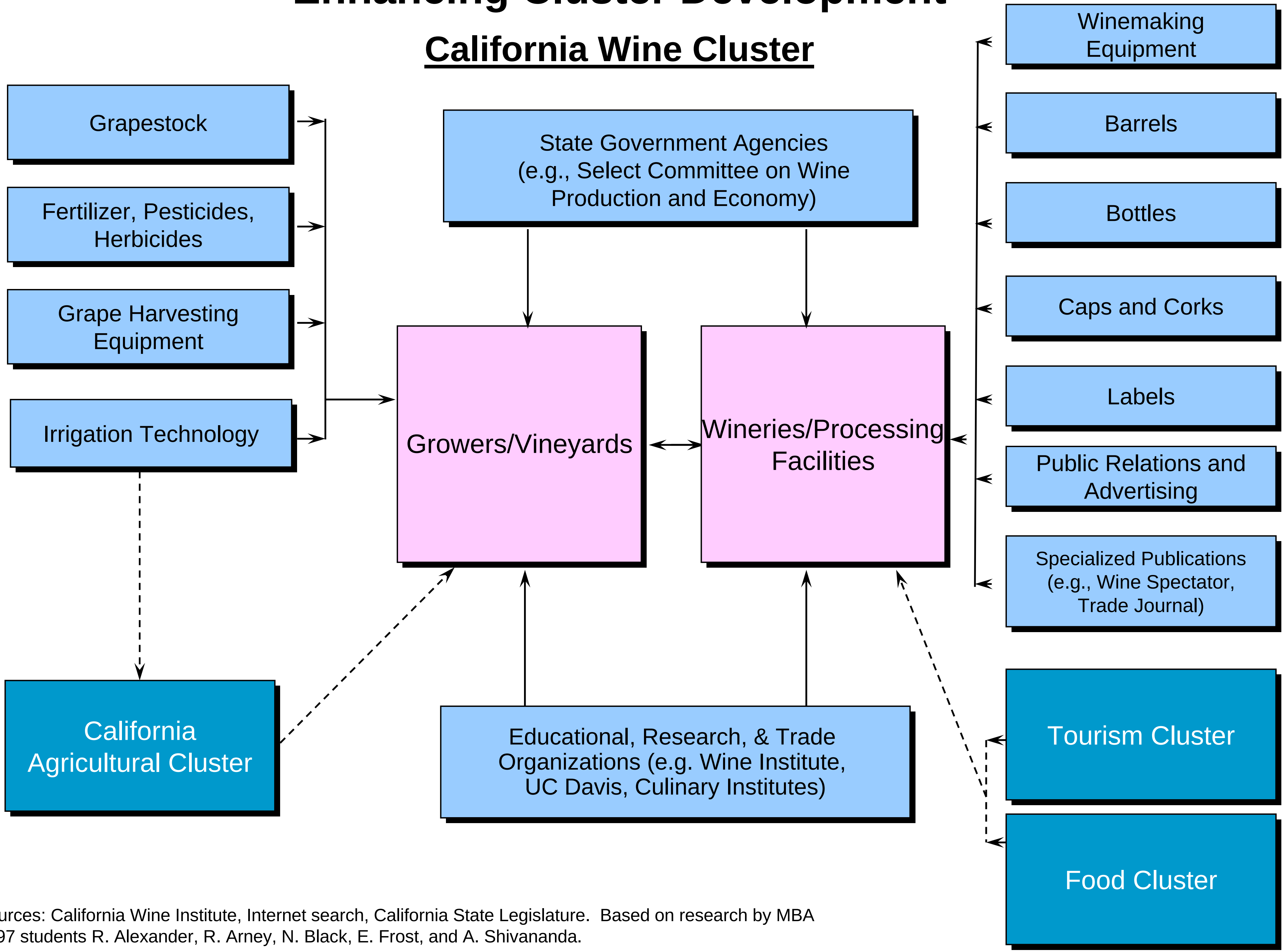
Tourism Cluster in Cairns, Australia



Sources: HBS student team research (2003) - Peter Tynan, Chai McConnell, Alexandra West, Jean Hayden

Enhancing Cluster Development

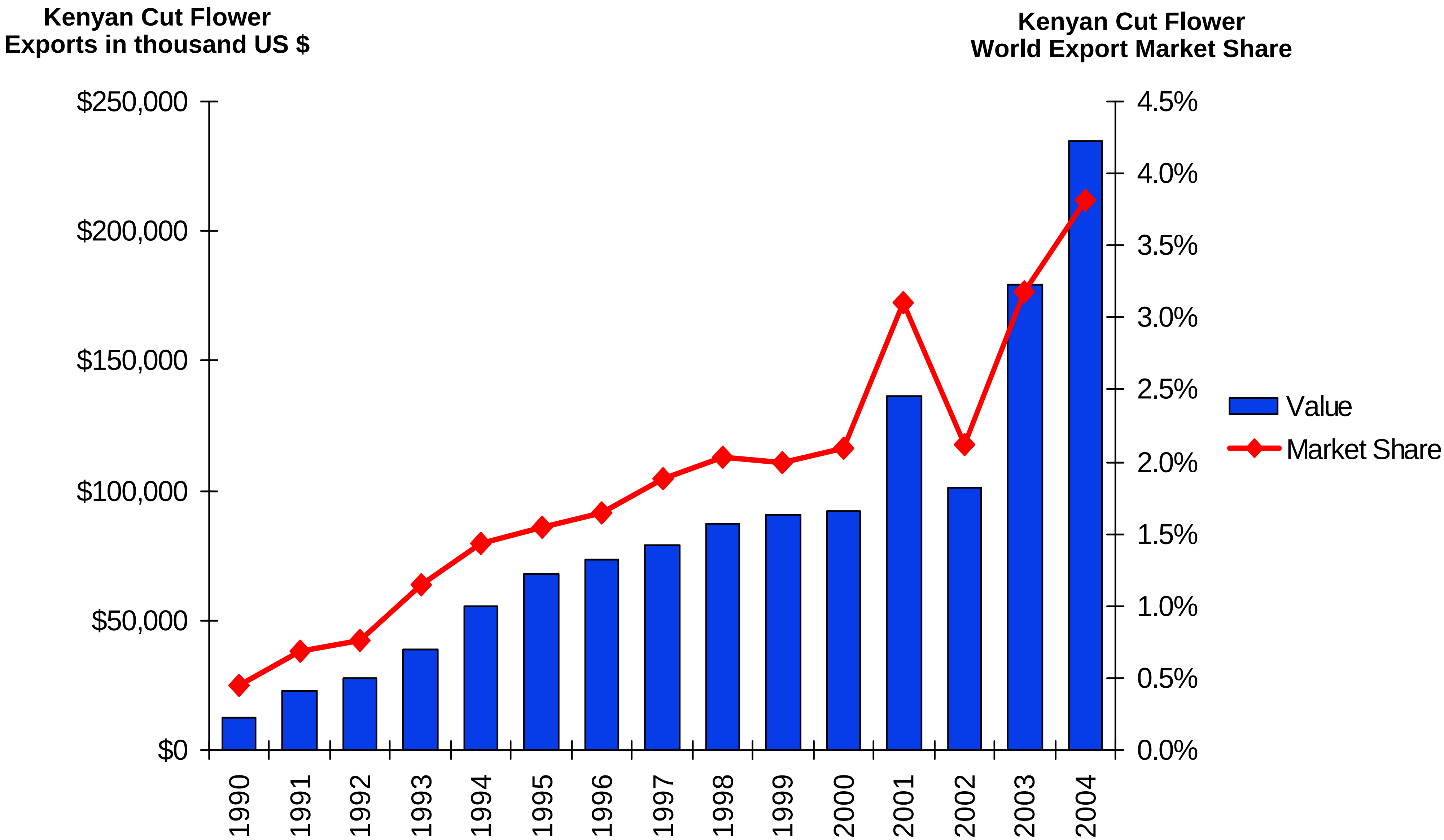
California Wine Cluster



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.

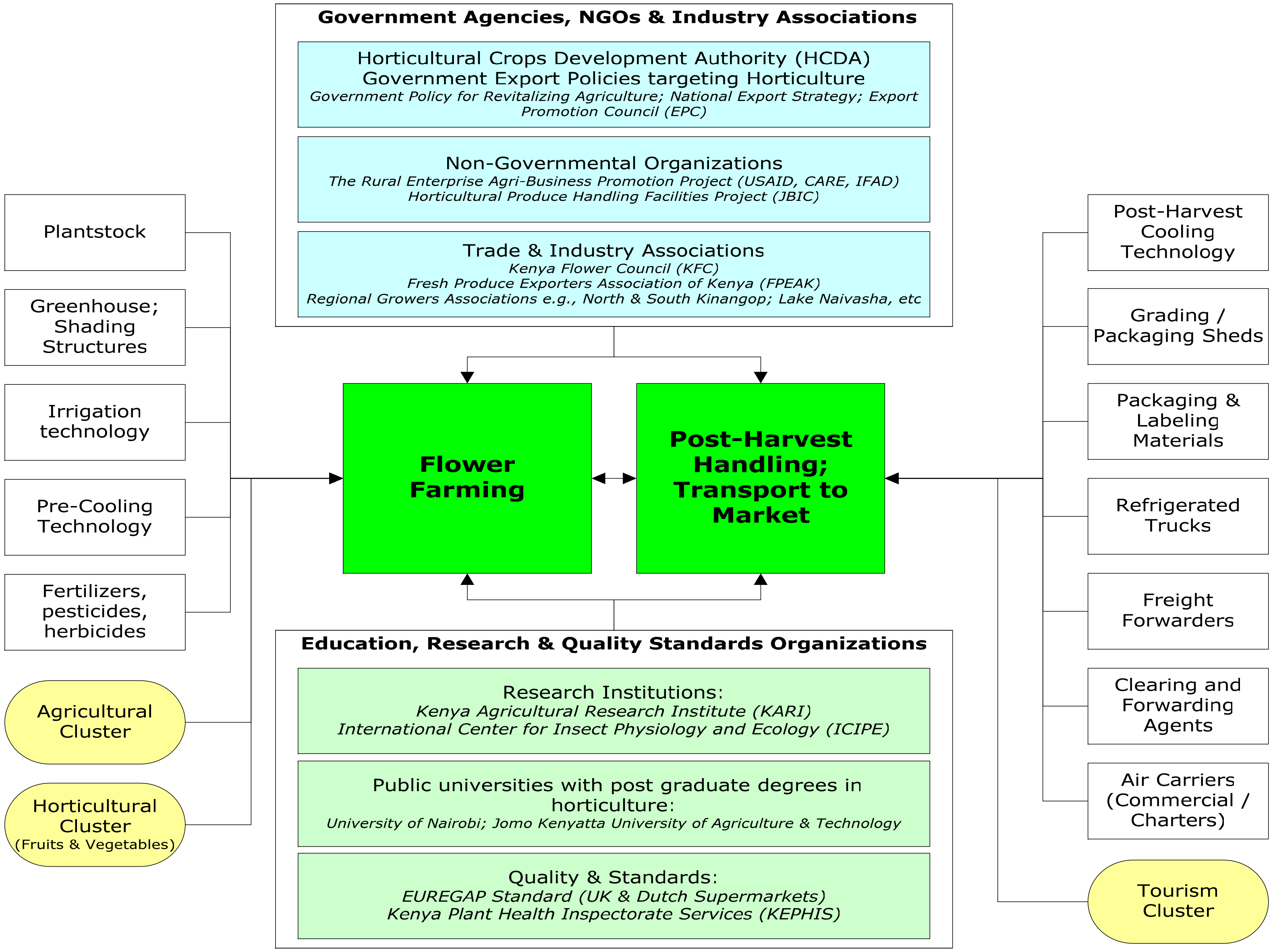
The Kenyan Cut Flower Cluster

Trade Performance



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.

Kenya's Cut Flower Cluster



Sources: HBS student team research (2007) - Kusi Hornberger, Nick Ndiritu, Lalo Ponce-Brito, Melesse Tashu, Tijan Watt

Institutions for Collaboration

Selected Massachusetts Organizations, Life Sciences

Life Sciences Industry Associations

- Massachusetts Biotechnology Council
- Massachusetts Medical Device Industry Council
- Massachusetts Hospital Association

University Initiatives

- Harvard Biomedical Community
- MIT Enterprise Forum
- Biotech Club at Harvard Medical School
- Technology Transfer offices

General Industry Associations

- Associated Industries of Massachusetts
- Greater Boston Chamber of Commerce
- High Tech Council of Massachusetts

Informal networks

- Company alumni groups
- Venture capital community
- University alumni groups

Economic Development Initiatives

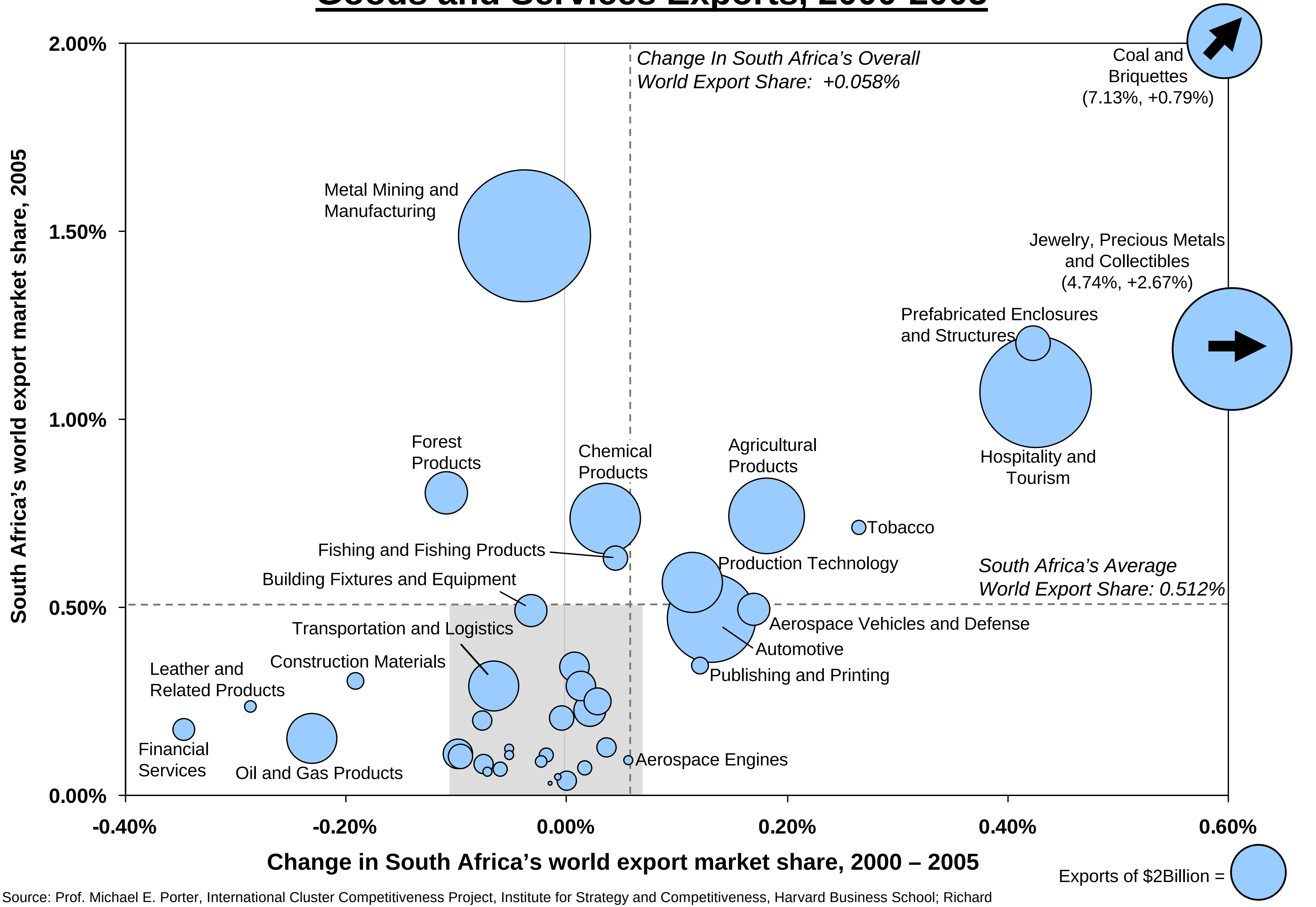
- Massachusetts Technology Collaborative
- Mass Biomedical Initiatives
- Mass Development
- Massachusetts Alliance for Economic Development

Joint Research Initiatives

- New England Healthcare Institute
- Whitehead Institute For Biomedical Research
- Center for Integration of Medicine and Innovative Technology (CIMIT)

South Africa Cluster Portfolio Measured by Exports

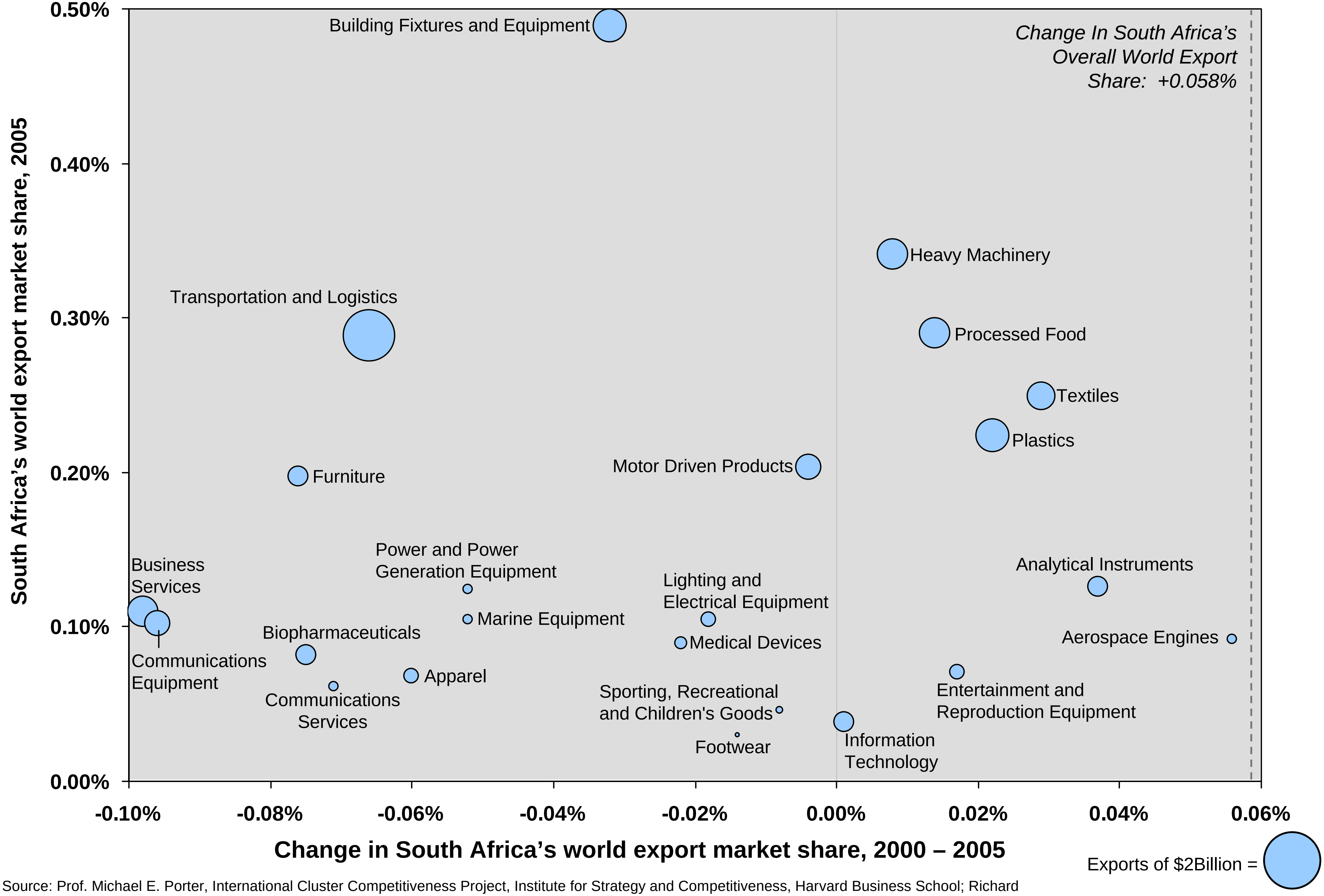
Goods and Services Exports, 2000-2005



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. Note: Services data 1997-2005.

South Africa Cluster Portfolio Measured by Exports

Goods and Services Exports, 2000-2005 (continued)



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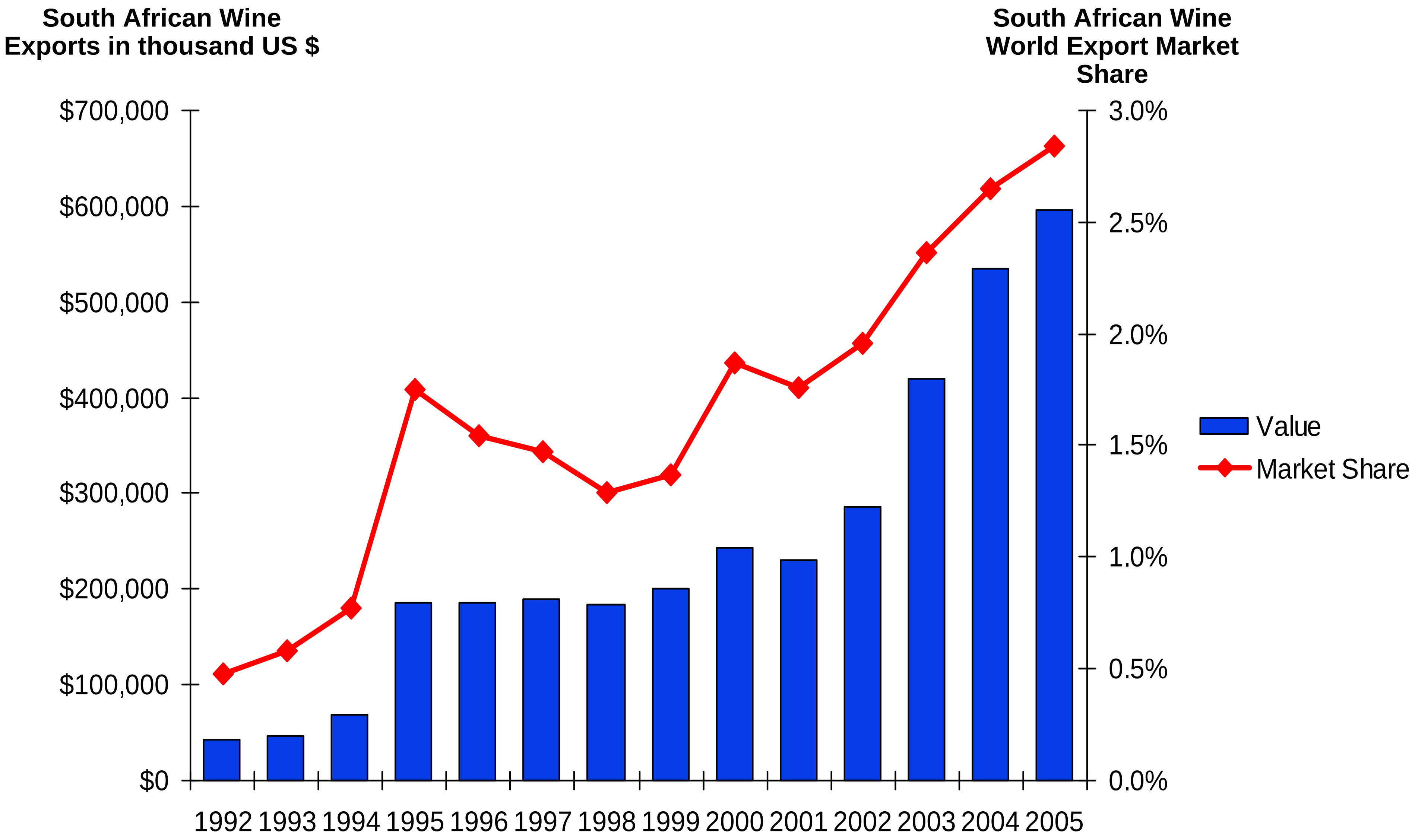
The South African Wine Cluster

Trade Performance



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.

The South African Wine Cluster

<u>Changing Government Roles</u>

- Until 1997, the South African wine industry was highly regulated through KWV (wine grower's cooperative):
  - Regulated prices
  - Quotas
  - Regulated planting

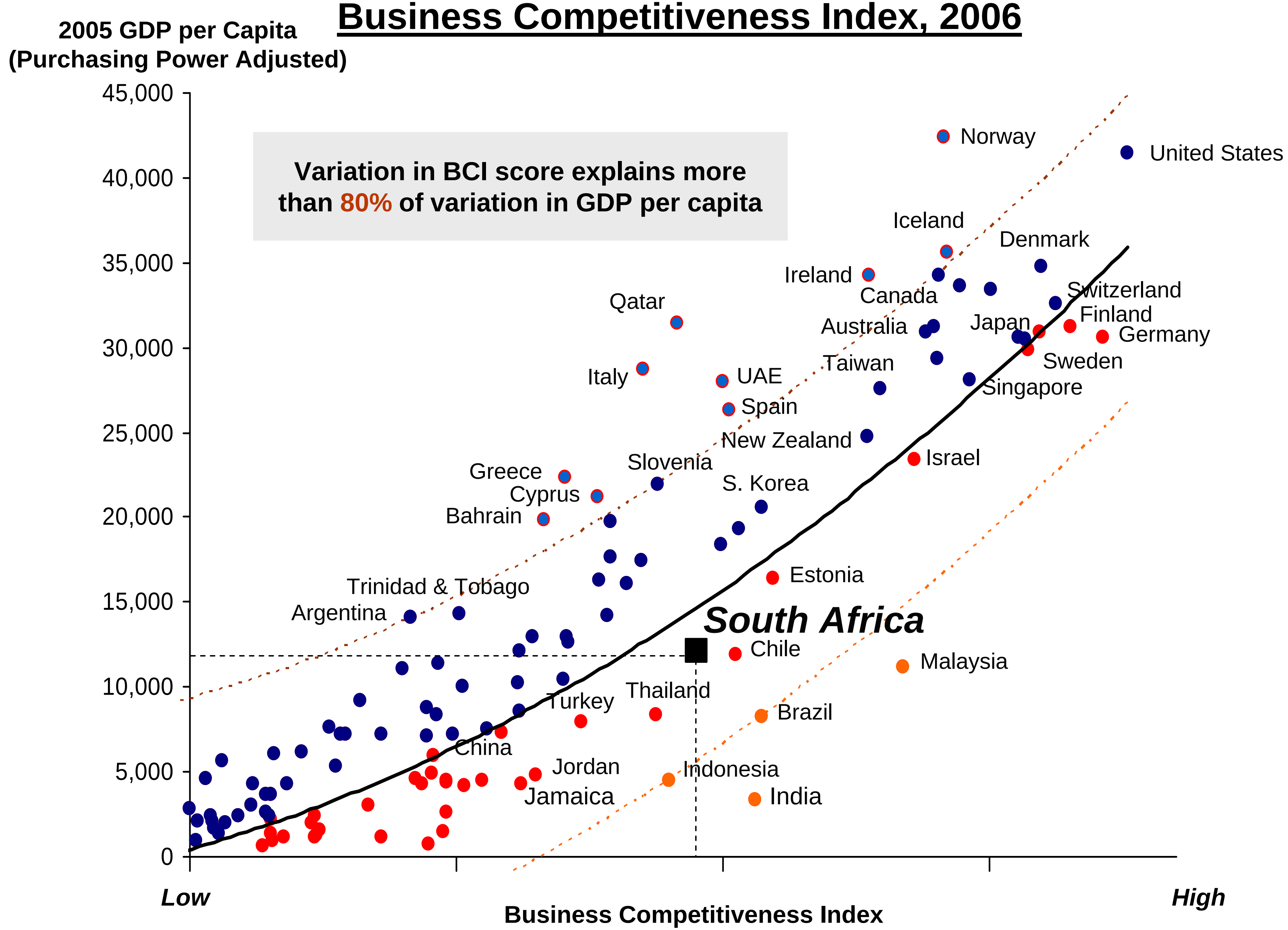
  → Surpluses and inefficient production

- After 1997, full deregulation occurred. In 2003, the Ministry of Agriculture announced the Wine Industry Strategic Plan (WIP), a new wine policy around:
  - Competitiveness
  - Black Economic Empowerment (BEE)
  - Resource management
  - Enhanced responsibility devolved to institutions for collaboration, especially South African Wine and Brandy Company (SAWB)

Source: Harvard students Mutsa Chironga, Maria Demeke, Christopher Maloney, Leigh C. Miselis, and Markus Scheuermaier

Ranking Microeconomic Competitiveness

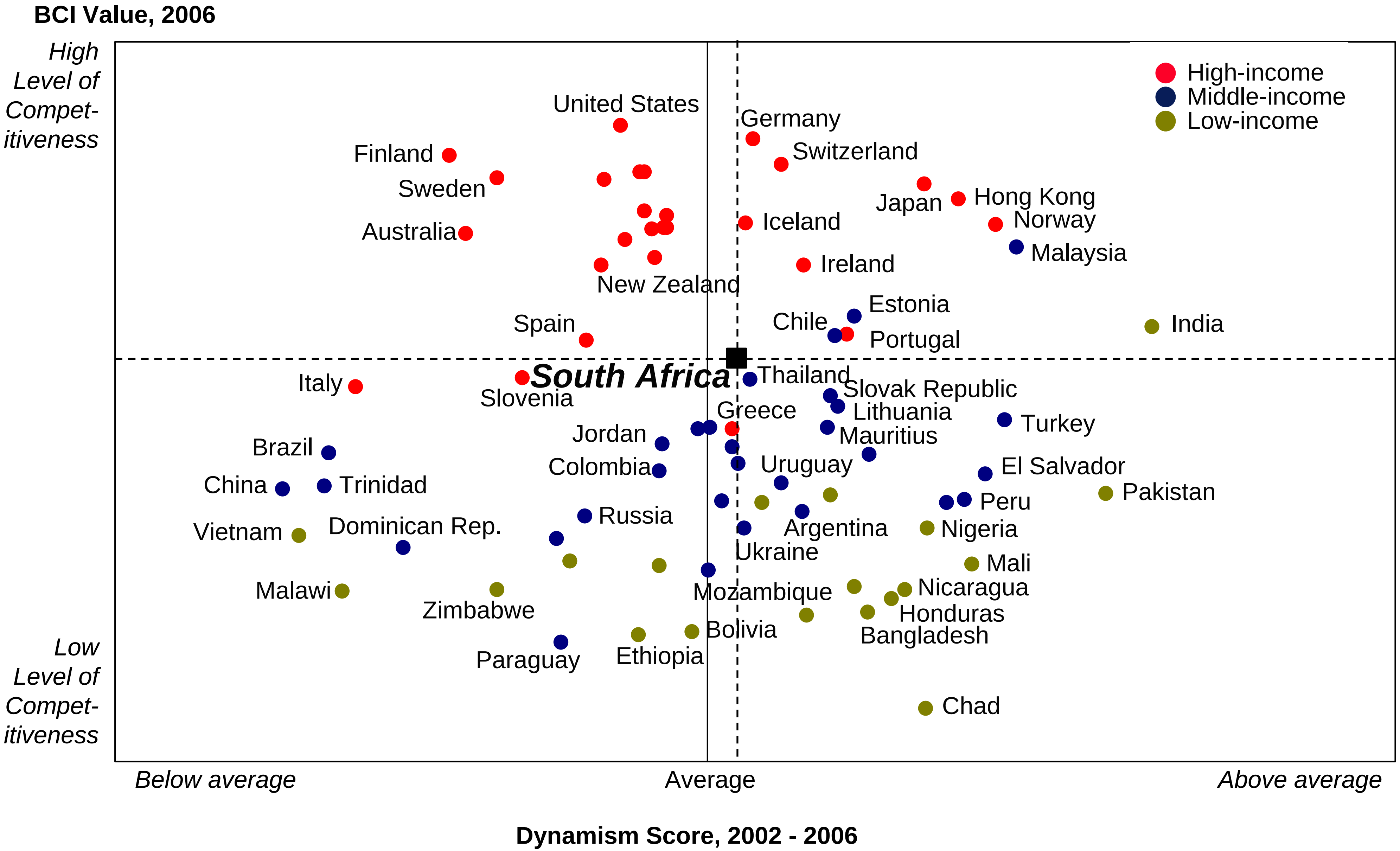
Business Competitiveness Index, 2006



Source: Global Competitiveness Report 2006

Competitive Dynamism

Rate of Competitiveness Improvement



Source: Global Competitiveness Report (2006)

South African Competitiveness in 2007

Overall competitiveness

- South Africa is **ranked 33rd** in the Business Competitiveness Index, down three ranks since 2001
- **Competitiveness improvement** has been **moderate**, only slightly above the global average
- South Africa's **current prosperity** is below the level expected given its competitiveness, pointing towards unexploited potential

Competitiveness profile

- **Strengths** are present in company sophistication, financial markets, and some aspects of context for rivalry
- **Weaknesses** are most visible in infrastructure and skills, especially basic skills

- South Africa is facing **critical bottlenecks** that limit its ability to exploit its strengths

Operational Effectiveness is Not Strategy

Operational Effectiveness

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

Run the same race faster

Strategic Positioning

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

Choose to run a different race

Geographic Influences on Competitiveness

Levels of Influence

World Economy

Broad Economic Areas

Groups of Neighboring Nations — *"The Neighborhood"*

Nations

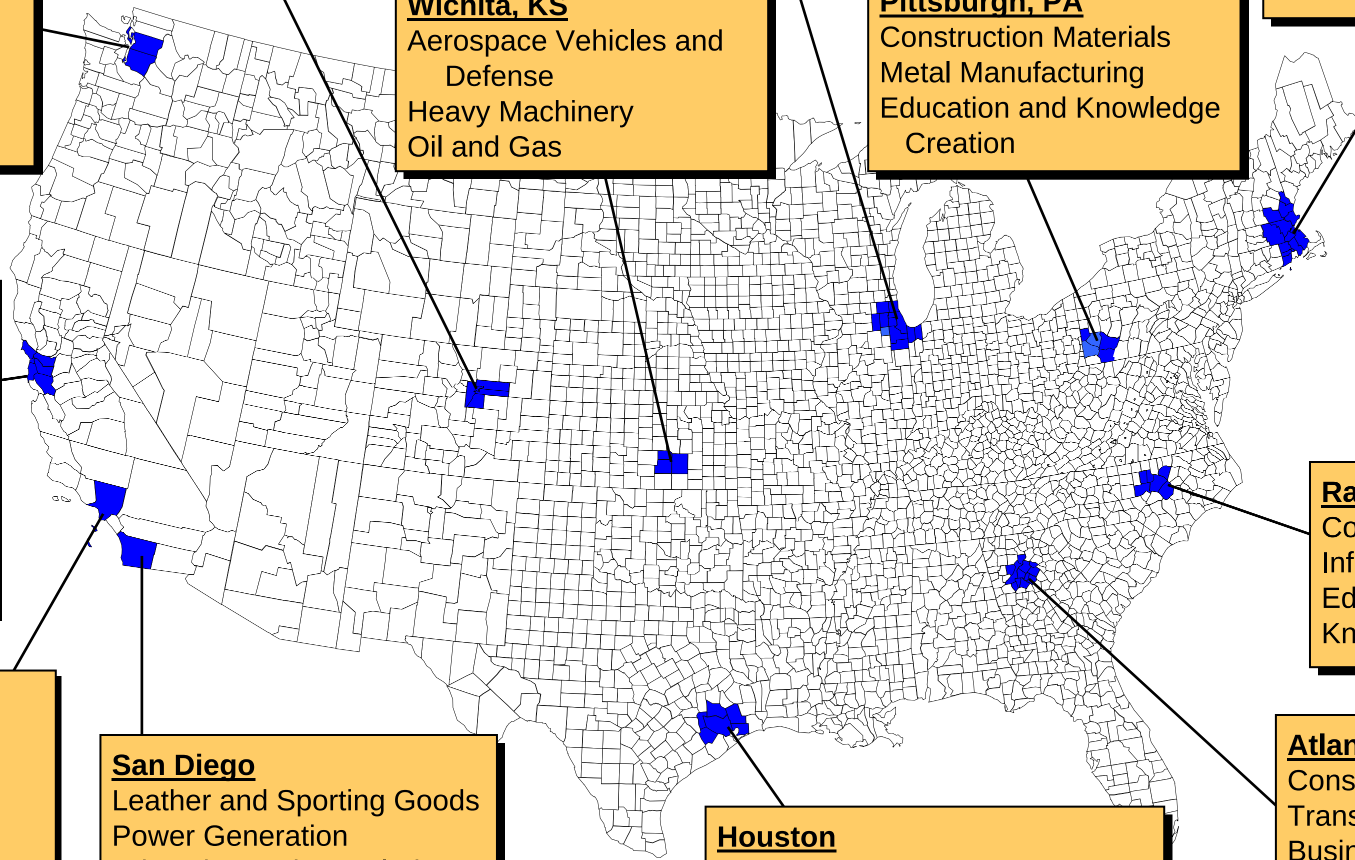
States, Provinces — *(Regional Economies)*

Metropolitan Areas — *(Regional Economies)*

Distressed Urban and Rural Communities

Specialization of Regional Economies

Select U.S. Geographic Areas



Seattle-Bellevue-Everett, WA
Aerospace Vehicles and Defense
Fishing and Fishing Products
Analytical Instruments

Denver, CO
Leather and Sporting Goods
Oil and Gas
Aerospace Vehicles and Defense

Wichita, KS
Aerospace Vehicles and Defense
Heavy Machinery
Oil and Gas

Chicago
Communications Equipment
Processed Food
Heavy Machinery

Pittsburgh, PA
Construction Materials
Metal Manufacturing
Education and Knowledge Creation

Boston
Analytical Instruments
Education and Knowledge Creatio
Communications Equipment

San Francisco-Oakland-San Jose Bay Area
Communications Equipment
Agricultural Products
Information Technology

Raleigh-Durham, NC
Communications Equipment
Information Technology
Education and Knowledge Creation

Los Angeles Area
Apparel
Building Fixtures, Equipment and Services
Entertainment

San Diego
Leather and Sporting Goods
Power Generation
Education and Knowledge Creation

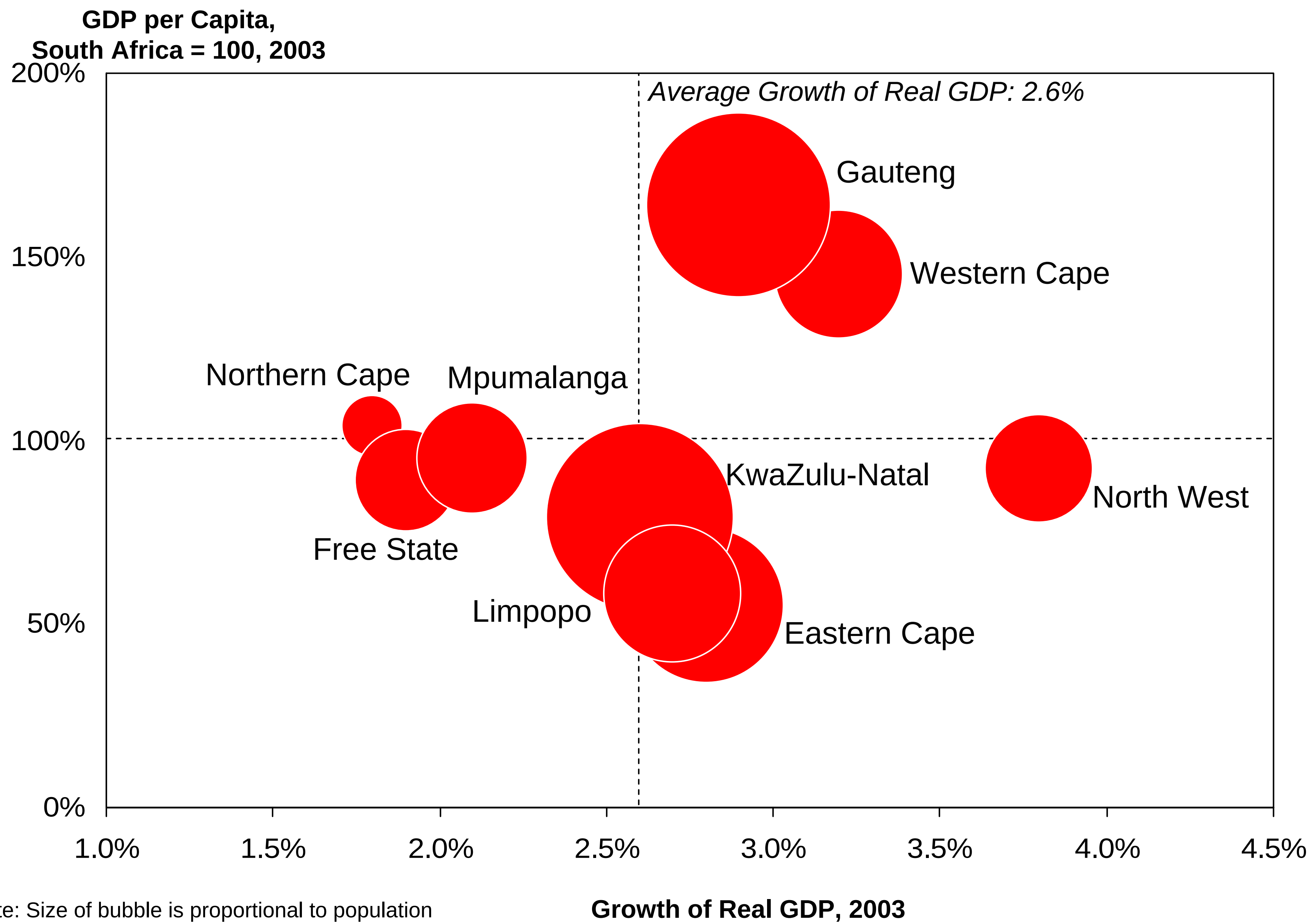
Houston
Heavy Construction Services
Oil and Gas
Aerospace Vehicles and Defense

Atlanta, GA
Construction Materials
Transportation and Logistics
Business Services

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 Regional Economic Performance

South African Provinces



Note: Size of bubble is proportional to population
Source: Statistics South Africa, GDP Annual Estimates, 2004.

South Africa's Role in the Neighborhood

Regional Economic Coordination

Illustrative Policy Areas

Factor (Input) Conditions

- Improve regional **transportation infrastructure**
- Create an efficient **energy** network
- Interconnect regional **communications**
- Link **financial markets**
- Facilitate the movement of students to enhance **higher education**
- Harmonize **regulatory requirements** for business
- Coordinate programs to improve **public safety**

Context for Strategy and Rivalry

- Coordinate **macroecono-mic** policies
- Eliminate **trade and investment barriers** within the region
- Simplify and harmonize **cross-border** regulations and paperwork
- Coordinate **antimonopoly** and **fair competition policies**

Demand Conditions

- Harmonize **environmental standards**
- Harmonize product **safety standards**
- Establish reciprocal **consumer protection laws**

Related and Supporting Industries

- Coordinate development of **cross-border clusters**, e.g.
  - Tourism
  - Agribusiness
  - Transport & Logistics
  - Business services

Regional Governance

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

The Process of Economic Development

Shifting Roles and Responsibilities

Old Model

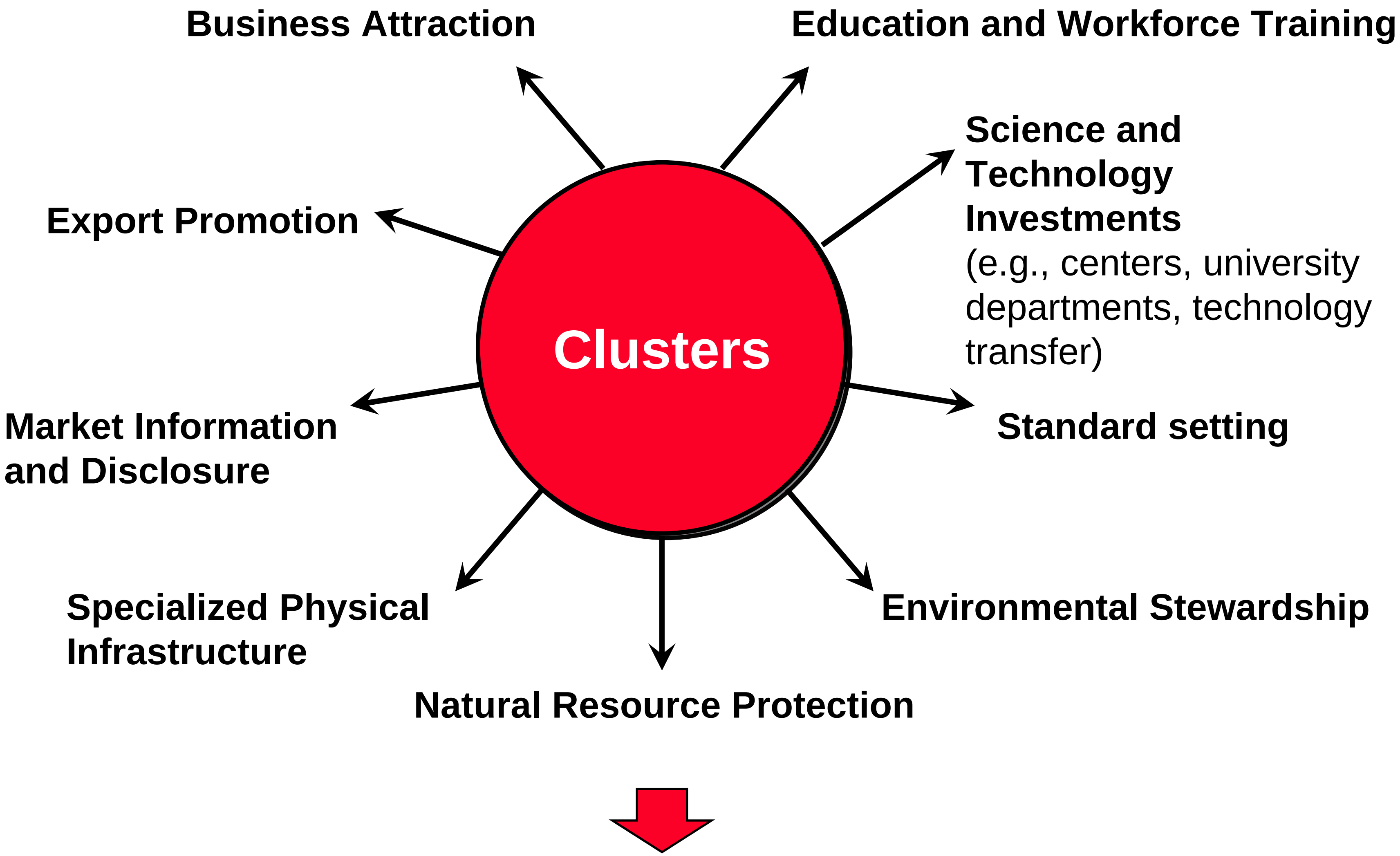
- **Government** drives economic development through policy decisions and incentives

New Model

- Economic development is a **collaborative process** involving government at multiple levels, the private sector, universities, research institutions, and business associations

- Competitiveness must become a **bottom-up process** in which many individuals, companies, clusters, and institutions take responsibility

Clusters and Economic Policy



- Clusters provide a framework for **organizing the implementation** of public policy and public investments towards economic development

Role of the Private Sector in Economic Development

- A company's competitive advantage depends partly 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 **address 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**
  - Collaboration, cost sharing, and increasing influence

The Australian Wine Cluster

Time Line

1930

First oenology course at Roseworthy Agricultural College

1955

Australian Wine Research Institute founded

1965

Australian Wine Bureau established

1970

Winemaking school at Charles Sturt University founded

1980

Australian Wine and Brandy Corporation established

1990

Winemaker's Federation of Australia established

1991 to 1998

New organizations created for education, research, market information, and export promotions

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

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

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

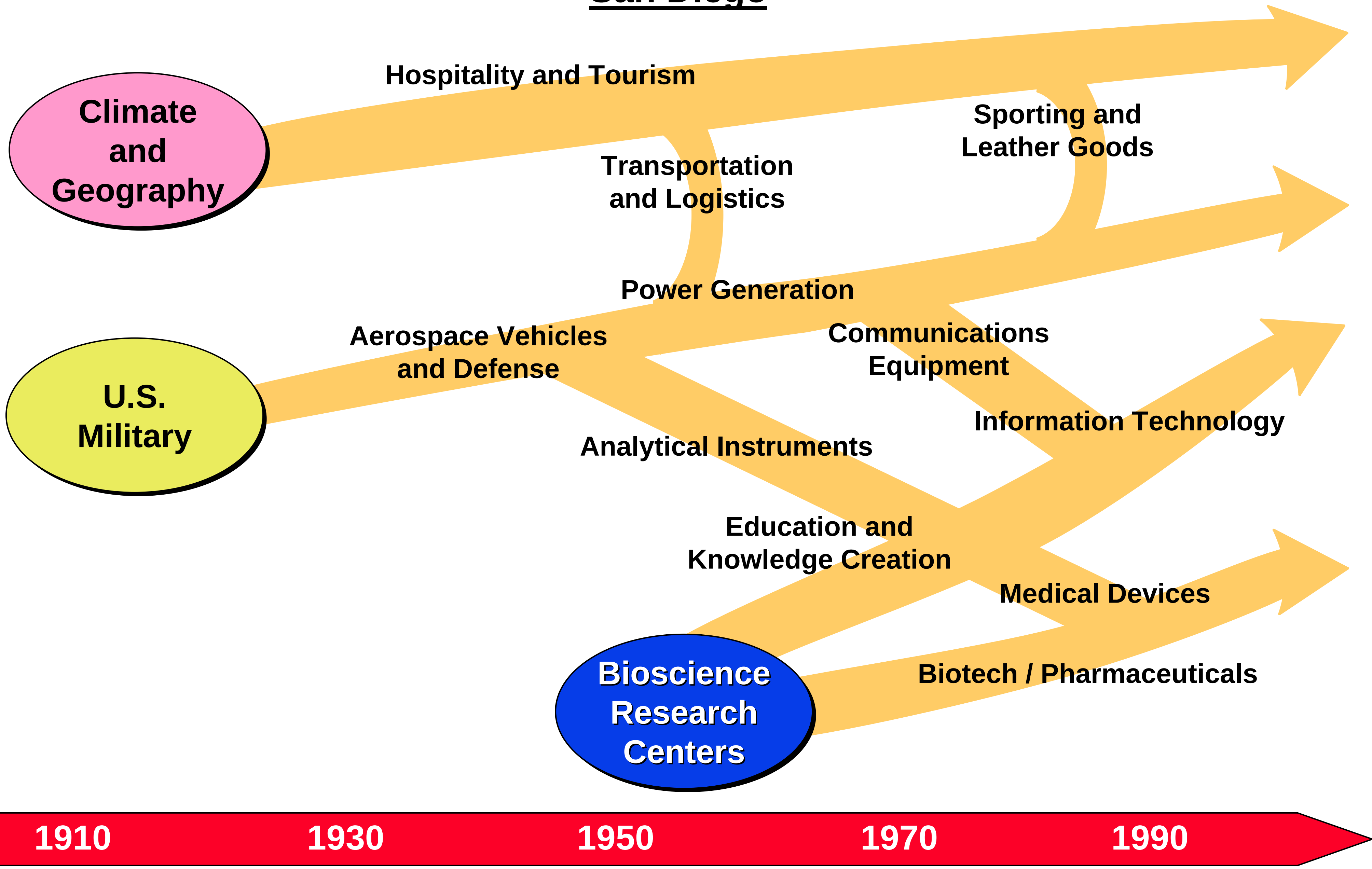
Wine Industry National Education and Training Council

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

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

The Evolution of Economies

San Diego



Defining an Economic Strategy

Value Proposition

- What is the **unique competitive position of the** nation given its location, legacy, and existing and potential strengths?
  - What roles with neighbors, the region, and the broader world?
  - What unique value as a business location?
  - For what types of activities and clusters?

Developing Unique Strengths

- What **elements of context** and the **business environment** become crucial priorities?
- What **existing** and **emerging clusters** should be developed first?

Achieving and Maintaining Parity with Peers

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

•ASGISA needs to become a true **national economic strategy**, defining the value proposition of the country in the global economy

National Economic Strategy

Singapore

National Value Proposition	Creating Unique Strengths	Mitigating Weaknesses
• What roles in regional and world economy? e.g., Business, financial, and knowledge hub of Southeast Asia	Macro/political/legal/social e.g., Absence of corruption	Macro/political/legal/social e.g., Expand cultural attractions
• What unique value as a business location? e.g., Highly efficient place to do business; access to skilled and hardworking staff	National Diamond e.g., Singapore's physical infrastructure	National Diamond e.g., Upgrade Singapore's research institutions; improve the efficiency of Singaporean domestic economy
• For what range of clusters, activities within clusters? e.g., clusters benefiting from a business hub but not dependent on a large home market or physical proximity to markets	Cluster Development e.g., Singapore's logistical services, financial services, petrochemical processing, tourism	Cluster Development e.g., Develop more Singaporean SMEs to deepen clusters; improve the number and quality of IFCs
	Company Capabilities e.g., large number of world-class multinationals with regional headquarters and significant operations in Singapore	Company Capabilities e.g., build the capability of Singaporean companies and encourage regional strategies
	Geographic Levels e.g., Growth Triangle, ASEAN	Geographic Levels e.g., Create friendly relationships with ASEAN neighbors

Government Economic Policy in South Africa
The Accelerated and Shared Growth Initiative (ASGISA)

- In 2004, the South African government set **ambitious goals** in terms of economic growth and social improvements
- In dialogue with the private sector, civil society, and experts, **binding constraints** to growth were identified

CONSTRAINTS		RESPONSES
• Volatile currency • Inefficient and costly transport infrastructure • Skill shortages • Barriers to entry and competition • Burdensome regulations for small companies • Weaknesses in administrative capacity	→	• Macroeconomic management • Infrastructure investments • Skills and education initiatives • Sector strategies • 'Second economy' programs • Public administration reform

Sectoral Priorities within ASGISA

TOP PRIORITY SECTORS
• Business Process Outsourcing • Tourism • Biofuels (under planning)

NEXT RANK OF PRIORITIES
• Chemicals • Metal beneficiation • Creative industries • Clothing and textiles • Durable consumer goods • Wood, pulp and paper

The Role of Government in Cluster Initiatives

Should...

- Actively participate
- Be ready to implement recommendations

May...

- Convene
- Provide matching funds

Should not

- Select priority clusters
- Define cluster action priorities

- Debates about the role of government in cluster development are too often focused on which clusters should be supported and how much financing they should get

- **Cluster selection** is an important but ultimately **operative question**; focus is necessary to achieve impact and not all clusters have equal potential
- **Financing** is important but cluster policy needs to be more; policy needs to improve the potential for companies to **increase productivity**

Backup

Cluster Specialization

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

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

Italy
- Design, marketing, and production of premium shoes
- Export widely to the world market

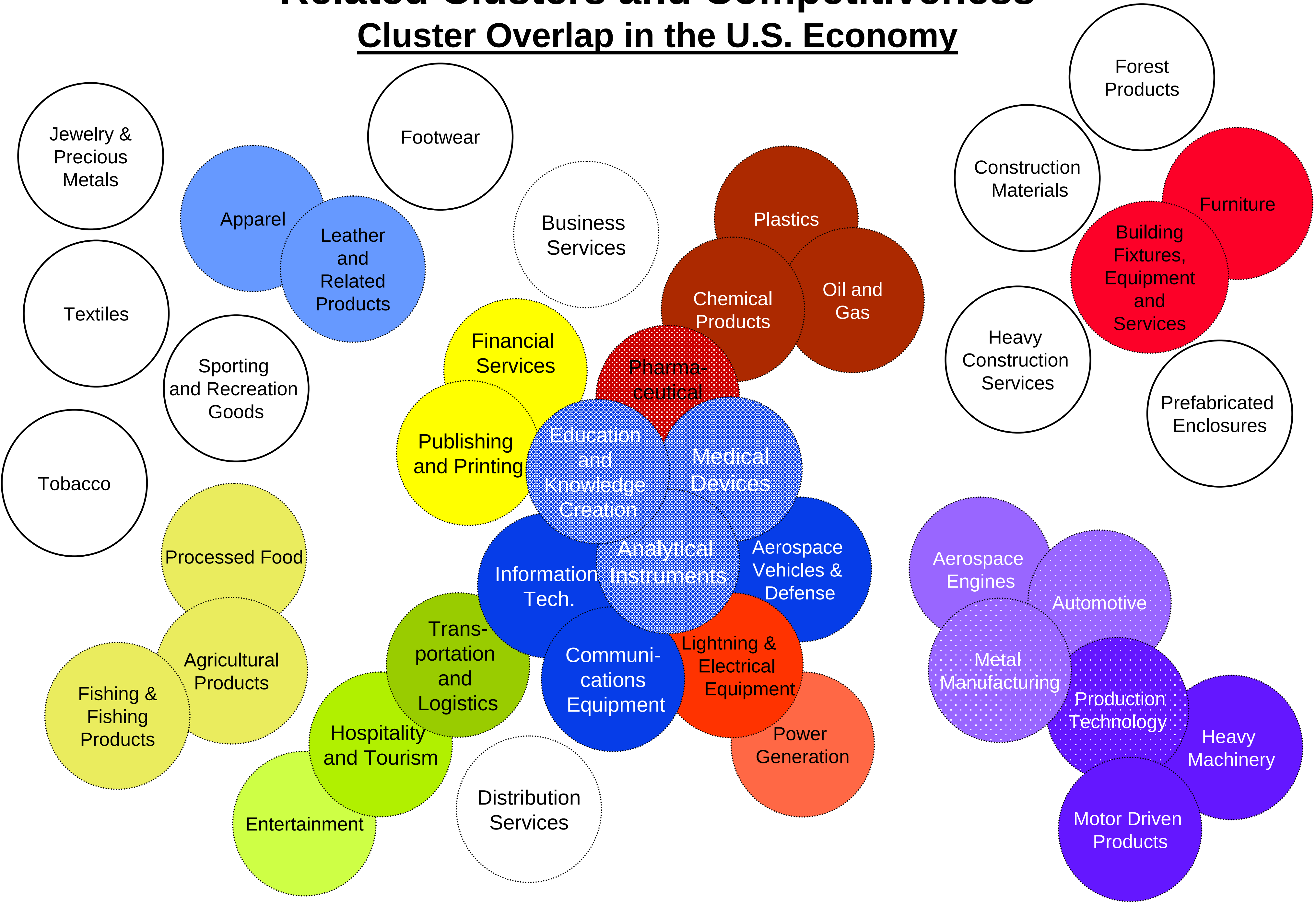
United States
- Design and marketing
- Focus on specific market segments like sport and recreational shoes and boots
- Manufacturing only in selected lines such as hand-sewn casual shoes and boots

Brazil
- Low to medium quality finished shoes, inputs, leather tanning
- Shift toward higher quality products in response to Chinese price competition

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

Source: Research by HBS student teams in 2002 – Van Thi Huynh, Evan Lee, Kevin Newman, Nils Ole Oermann

Related Clusters and Competitiveness
Cluster Overlap in the U.S. Economy



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

The Composition of Regional Economies

United States, 2004

	Traded	Local	Natural Resource-Driven
Share of Employment	29.3%	70.0%	0.7%
Employment Growth Rate, 1990 to 2004	0.7%	2.4%	-1.2%
Average Wage	$49,367	$30,416	$35,815
Relative Wage	137.2%	84.5	99.5
Wage Growth	4.2%	3.4%	2.1%
Relative Productivity	144.1	79.3	140.1
Patents per 10,000 Employees	23.0	0.4	3.3
Number of SIC Industries	590	241	48

Note: 2004 data, except relative productivity which uses 1997 data.

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

Stages Of Competitive Development

Shifting Policy Imperatives

Factor-Driven Economy → **Investment-Driven Economy** → **Innovation-Driven Economy**

Cost of Inputs

- Macro, political, and legal stability
- Efficient basic infrastructure
- Lowering the regulatory costs of doing business

Efficiency

- Local competition
- Market openness
- Incentives and rules encouraging productivity
- Cluster formation and activation

Unique Value

- Advanced skills
- Advanced infrastructure
- Incentives and rules encouraging innovation
- Cluster upgrading

Source: Porter, Michael E., T*he Competitive Advantage of Nations*, Macmillan Press, 1990

Government and Economic Development

Roles

- **Improve the macroeconomic, political, legal, and social context**
  - Establish a **stable, predictable, and effective** macroeconomic, legal, and political context
  - Improve the **social conditions** of citizens

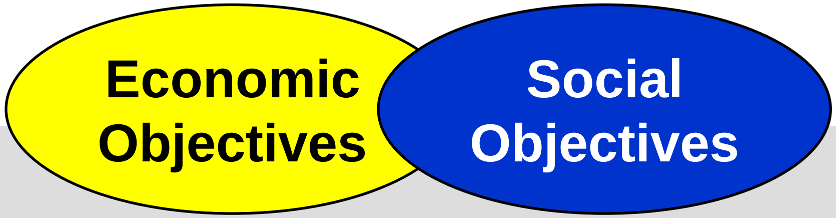
- **Upgrade the general business environment**
  - Improve the availability, quality, and efficiency of **cross-cutting** or **general purpose inputs, infrastructure, and institutions**
  - Set **overall rules and incentives** governing competition that encourage productivity growth

- **Facilitate cluster formation and enhancement**
  - Identify **existing and emerging clusters**
  - Encourage and support **cluster upgrading**

- **Lead a collaborative process of economic change**
  - Develop and overall **economic strategy** together with key constituencies
  - Organize the **parts of government** in a coordinated development agenda
  - Engage **multiple levels of government** in economic development
  - Create **institutions** and **processes** for upgrading competitiveness that inform citizens and mobilize the private sector to take action

Integrating Economic and Social Policy

- In the new thinking on competition, there is **not an inherent conflict** between economic and social objectives, but a long term synergy



- The **competitiveness of companies** depends heavily on
  - Rising skill levels
  - Safe working conditions
  - A sense of equal opportunity
  - Low levels of pollution (pollution is a sign of unproductive use of physical resources)
- However, efforts to meet “social” objectives must be **aligned with productivity** and prepare and motivate individuals to **succeed in the market system**
- Efforts to meet “economic” objectives must include explicit programs to **raise human capability**, improve the lives and **sense of opportunity** for individuals, and enhance the broader business environment

Integrating Economic and Social Policy

Examples

Training

- Organize training investments around clusters

Housing

- Create mechanisms to encourage home ownership; provide incentives for new company formation in the construction cluster; reduce unnecessary costs of housing construction due to regulatory and approval requirement; secure property rights to residents

Health Care

- Create incentives for private health insurance; open health care delivery to competition

Social Security

- Create incentives for saving; encourage a private pension system that agglomerates investment capital

Environmental Quality

- Institute a regulatory regime that encourages movement to more environmental friendly methods; invest in technical assistance in eco-efficient processes and practices

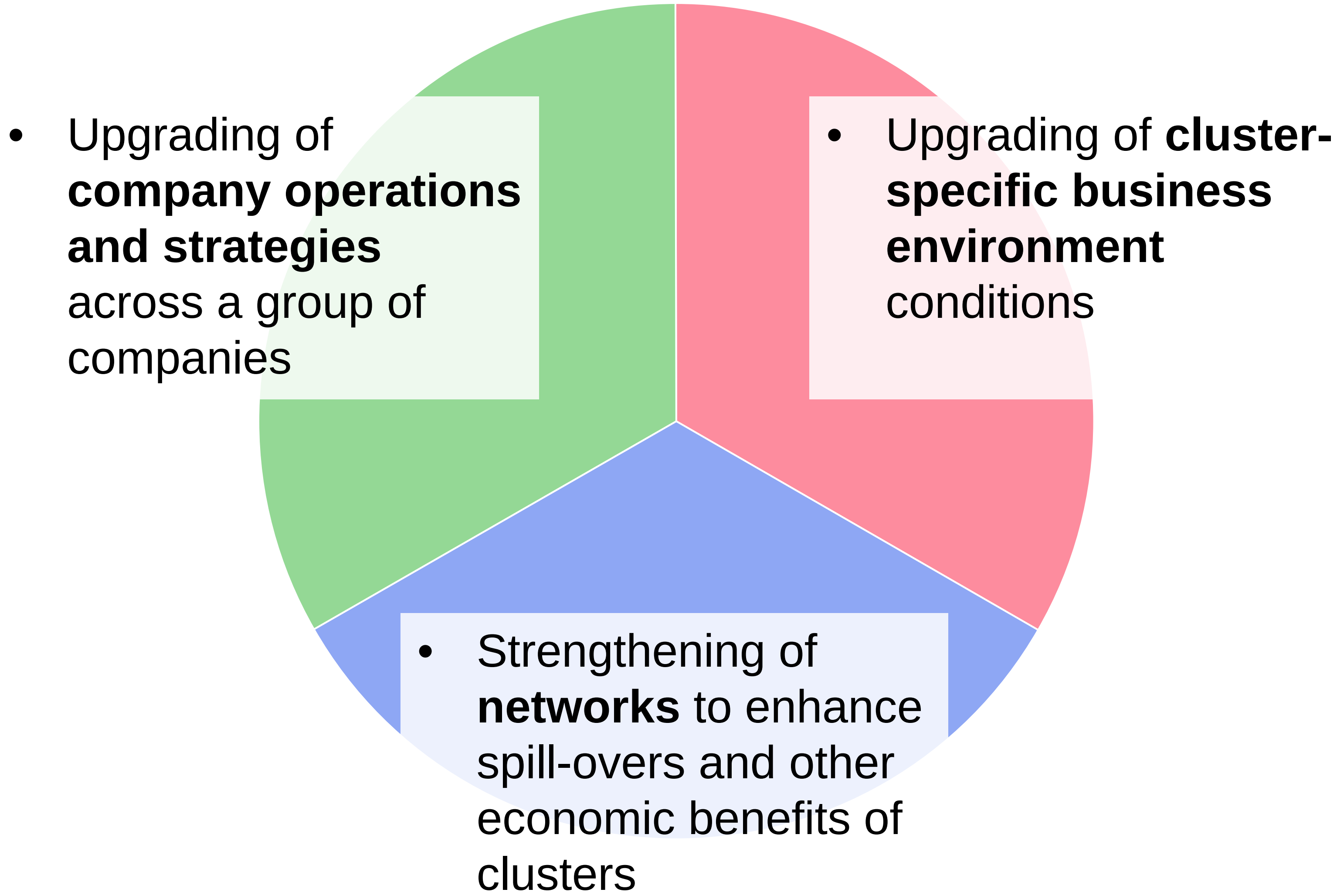
ASGISA and Beyond: An Early Assessment

- The Accelerated and Shared Growth Initiative (ASGISA) is an **important step forward** for South African competitiveness policy
  - Fact-driven analysis of specific challenges
  - Identification of key priorities
  - Medium-term perspective with regular assessment of progress

- The ASGISA needs to be **‘the’ economic action plan** for the country, internally consistent and widely accepted as a national objective
- **Execution is crucial**; even when the policy right area is identified, success depends on specific steps taken and the government’s capacity to deliver
- The action plan needs to add a clear **geographic dimension**, mobilizing South African regions and leveraging integration with neighboring countries

What are Cluster Initiatives?

Cluster initiatives are ***collaborative activities*** *by a* ***group*** *of companies, public sector entities, and other related institutions with the objective to improve the competitiveness of a group of* ***interlinked economic activities*** *in a* ***specific geographic region***



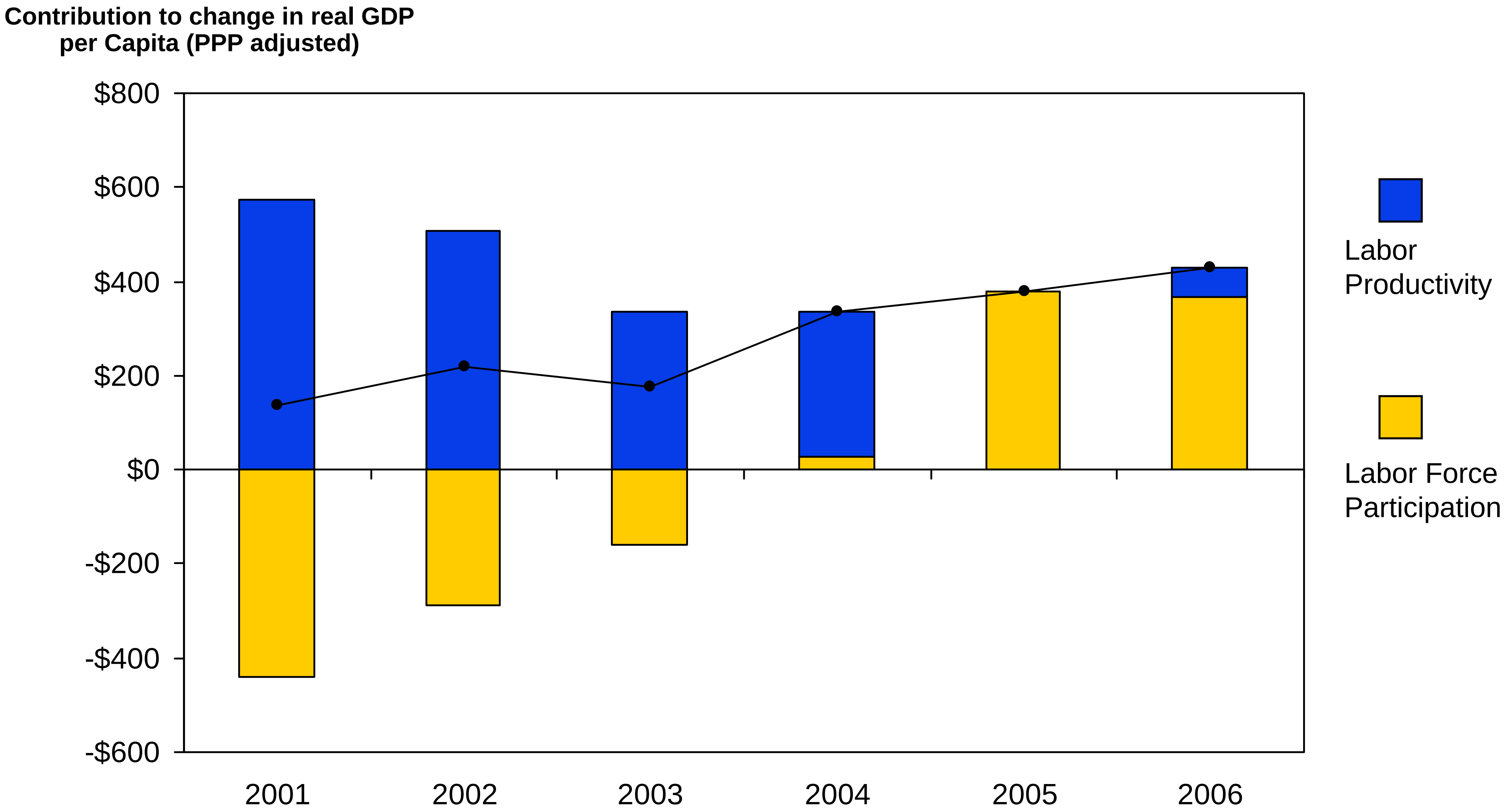
Towards Sustainable Black Economic Empowerment

Selected Policies

- Improve **social conditions**
- Improve and extend **public education**
- Invest aggressively in **managerial training** for black citizens
- Create incentives and support the hiring and promotion of black employees into **low- and middle-management** positions in white-owned local companies as well as multinationals
- Focus on upgrading **indigenous local businesses**, including in agriculture, local services, and manufacturing businesses serving local needs
- Place early attention to **clusters** involving small- and medium size enterprises
- Create incentives for **risk capital investments** in business with significant (>10%) black ownership. Avoid programs that apply only to majority black-owned businesses, especially when other owners are passive investors or private equity firms

- There a **no short cuts** for addressing this long-term challenge

Decomposing South Africa’s GDP per Capita Growth



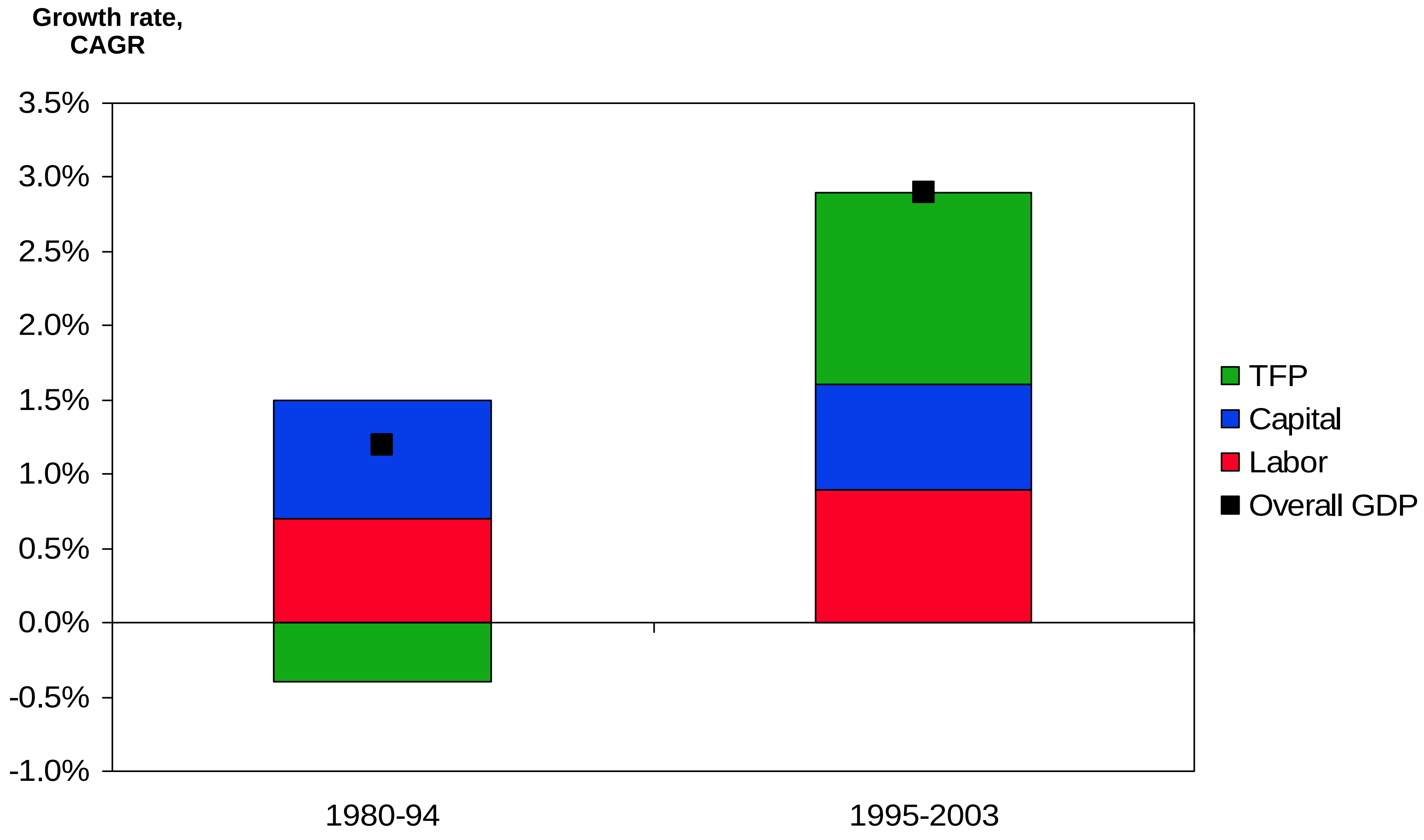
Note: Data before 2001 not available.
Source: EIU (2007)

U.S. Patenting by South African Institutions

	Organization	Patents Issued from 2000 to 2004
1	SASOL TECHNOLOGY (PROPRIETARY) LIMITED	29
2	WINDSOR TECHNOLOGIES LIMITED	11
3	CSIR	8
4	WATER RESEARCH COMMISSION	6
4	DENEL (PROPRIETARY) LIMITED	6
4	IPCOR NV	6
4	SUPERSENSOR (PROPRIETARY) LIMITED	6
8	TECHNOLOGY FINANCE CORPORATION (PROPRIETARY) LIMITED	5
8	IMPLICO B.V.	5
8	CLAAS SELBSTFAHRENDE ERNTEMASCHINEN GMBH	5
11	SLIC TRADING COMPANY LIMITED	4
11	ESKOM	4
11	ADCOCK INGRAM LIMITED	4
14	MEDTRONIC INC.	3
14	MINTEK	3
14	SANDVIK AKTIEBOLAG	3
14	BILLITON INTELLECTUAL PROPERTY B.V.	3
14	CATALYTIC DISTILLATION TECHNOLOGIES	3
14	UNIVERSITY OF PRETORIA	3
14	SALBU RESEARCH AND DEVELOPMENT (PROPRIETARY LIMITED)	3
14	GARFIELD INTERNATIONAL INVESTMENTS LIMITED	3
14	SOUTH AFRICA NUCLEAR ENERGY CORPORATION LTD.	3
14	AZOTEQ (PTY) LIMITED	3

Note: Shading indicates universities, research institutions or government agencies. Nine more institutions with three patents are not listed.
Source: US Patent and Trademark Office (www.uspto.gov). Author's analysis.

Decomposing South African Real GDP Growth



Source: IMF (2006)

Macroeconomic, Political, Legal, and Social Context

Macroeconomic policies

- **Sound fiscal and monetary policies** create stability and encourage business investment and upgrading
- **Sound and stable macroeconomic conditions** hold down interest rates and provide accurate price signals for market transactions

Political governance

- **Due process in political decisions** and **orderly transfers of power** create a stable planning horizon for business
- **Checks and balances** in the political system mitigate instability and the abuse of power

Legal system

- An **independent, timely, effective and trusted legal system** solidifies the rule of law and provides a **fair environment for business**, encouraging investment
- Strict monitoring and prosecution of **corruption** rewards productivity instead of favoritism

Social conditions

- **Improving social conditions** in basic education, housing, health, and absence of discrimination enhances productivity
- A **functioning social safety net** gives citizens the confidence to accept and deal with change in the economy
- **Improvements of social conditions** signal the benefits of reforms and **increase the political support** for policies to enhance competitiveness