

# Competitiveness: Creating a Rwandan Economic Strategy

Professor Michael E. Porter  
Institute for Strategy and Competitiveness  
Harvard Business School

Kigali, Rwanda  
July 2008

---

This presentation draws on ideas from Professor Porter's articles and books, in particular, [The Competitive Advantage of Nations](#) (The Free Press, 1990), "Building the Microeconomic Foundations of Competitiveness," in [The Global Competitiveness Report 2006](#) (World Economic Forum, 2006), "Clusters and the New Competitive Agenda for Companies and Governments" in [On Competition](#) (Harvard Business School Press, 1998), and ongoing research on clusters and competitiveness. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means - electronic, mechanical, photocopying, recording, or otherwise - without the permission of Michael E. Porter.

Further information on Professor Porter's work and the Institute for Strategy and Competitiveness is available at [www.isc.hbs.edu](http://www.isc.hbs.edu)

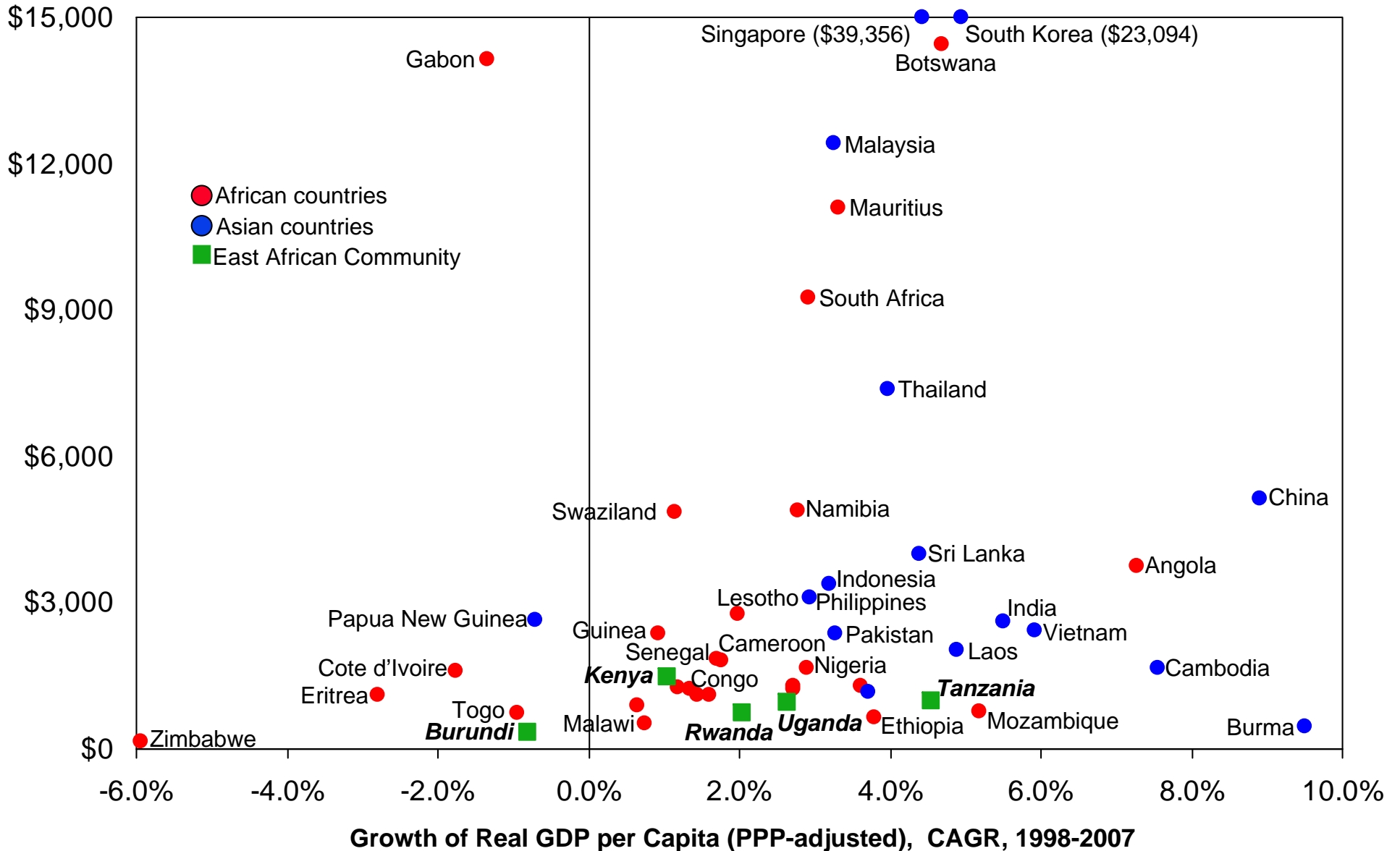
Version: July 20, 2008

---

# Prosperity Performance

## East Africa versus Other Developing Countries

PPP-adjusted GDP per Capita, 2007 (\$USD)

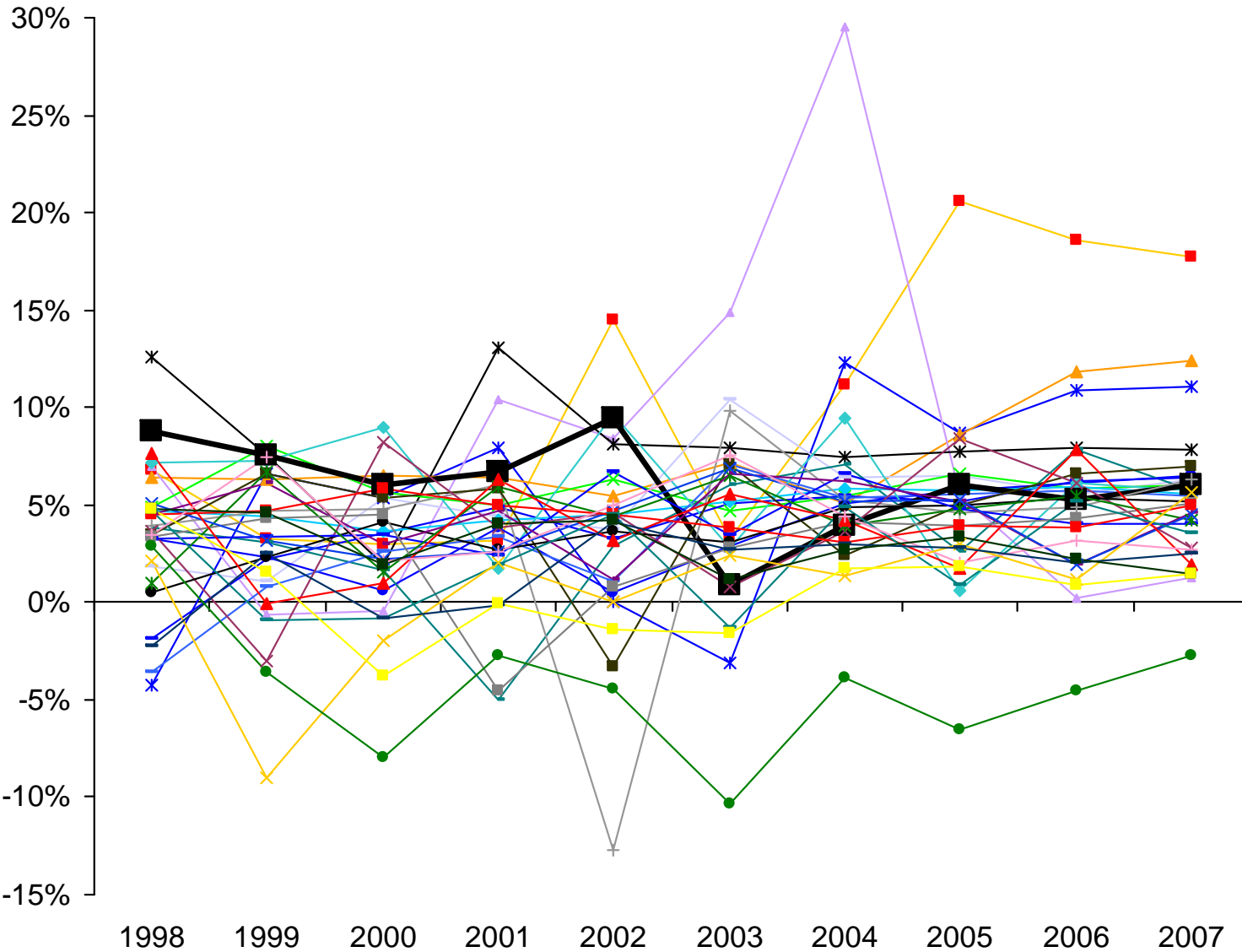


Note: highlighted countries are part of the East African Community (EAC). Source: EIU (2008), authors calculations

# Comparative Economic Performance

## Real GDP Growth Rates

Annual growth rate of real GDP (US\$ 2005 prices)



Countries sorted by 2003-2007 annual real GDP growth rate (CAGR)

- ANGOLA
- ETHIOPIA
- SUDAN
- CHAD
- MOZAMBIQUE
- NIGERIA
- UGANDA
- KENYA
- MALAWI
- ZAMBIA
- GHANA
- LIBYA
- BOTSWANA
- RWANDA
- MADAGASCAR
- THE GAMBIA
- CONGO (Dem Rep.)
- SOUTH AFRICA
- NAMIBIA
- BURKINA FASO
- SENEGAL
- MACEDONIA
- ALGERIA
- BENIN
- MOROCCO
- BURUNDI
- CAMEROON
- GABON
- TOGO
- GUINEA
- COTE D'IVOIRE
- ZIMBABWE

# Rwanda Competitiveness in 2008

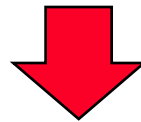
- Rwanda continues to be on a **positive track** for continuing growth and improvements in prosperity levels
- The economic gains are a reflection of the **policy reforms** undertaken as well as the bouncing back from low current levels of GDP
- Rwanda has also **weathered** the impact of political disturbances in Kenya, a weakening global economy, and continued political tensions with individual European countries



- Despite these achievements, Rwanda will **need further efforts** to realize the ambitious goals of its longer-term economic strategy
- Key **areas for action** are
  - Better alignment of government and donor activities with core competitiveness needs of the Rwandan economy
  - Better coordination across different areas of policy
  - Stronger focus on the barriers for private sector development in physical infrastructure and government rules and regulations

# 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) that a country can sustain
  - 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



- 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

# Sources of Prosperity

## Inherited Prosperity

- Prosperity is derived from selling or exploiting **inherited natural resources**
- Prosperity is **constrained**



- **Government** is the central actor in the economy as the owner and distributor of resource wealth
  - Resource revenues allow **unproductive policies and practices to persist**
- **Government's role** gravitates towards the **distribution of wealth** as interest groups seek a bigger share of the pie

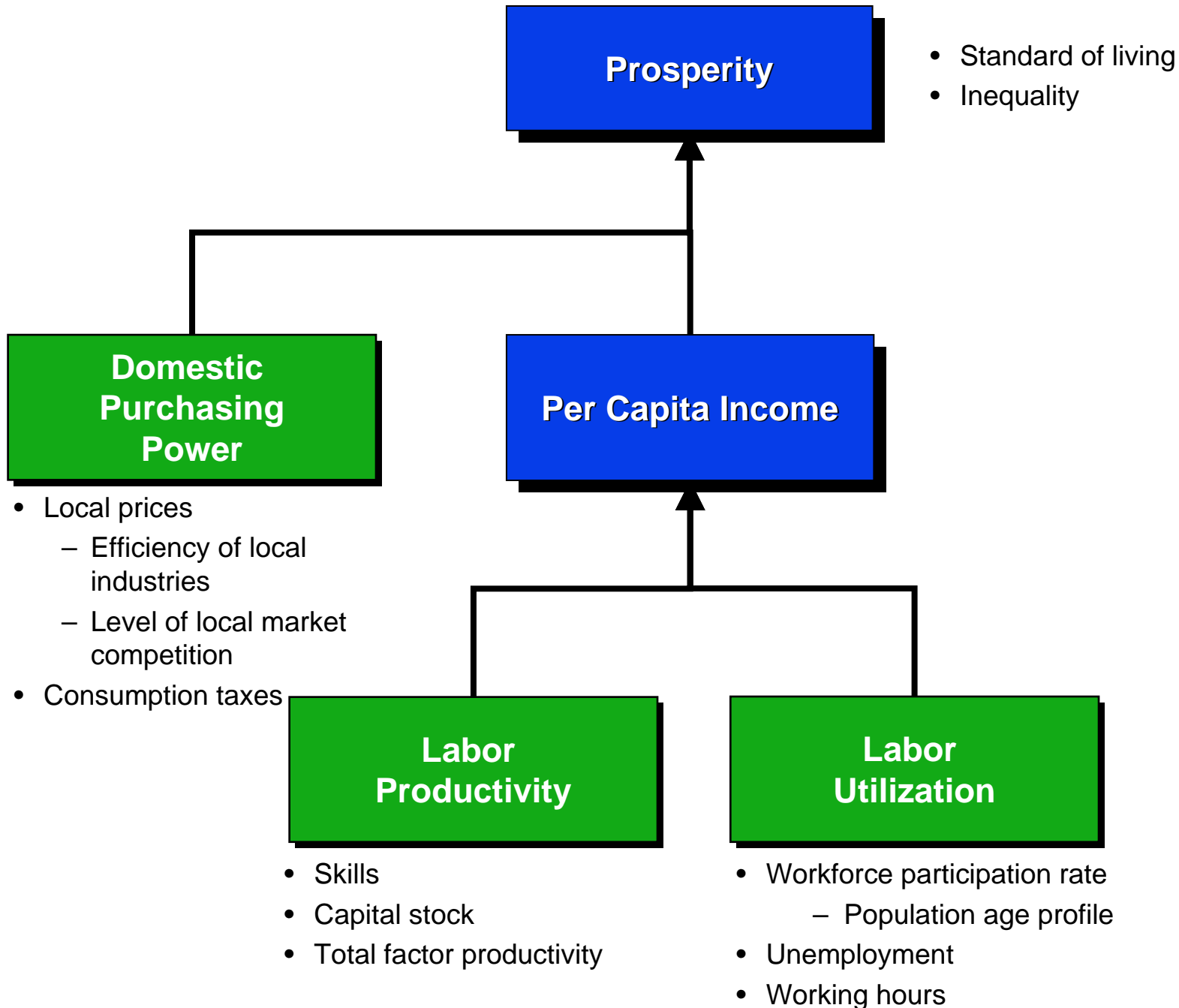
## Created Prosperity

- Prosperity is derived from **creating more and more valuable products and services with rising efficiency**
- Prosperity is **unlimited**



- **Companies** are the central actors in the economy
  - Prosperity can only be created by **firms**
- **Government's role** is to create the **enabling conditions for productivity** and foster private sector development

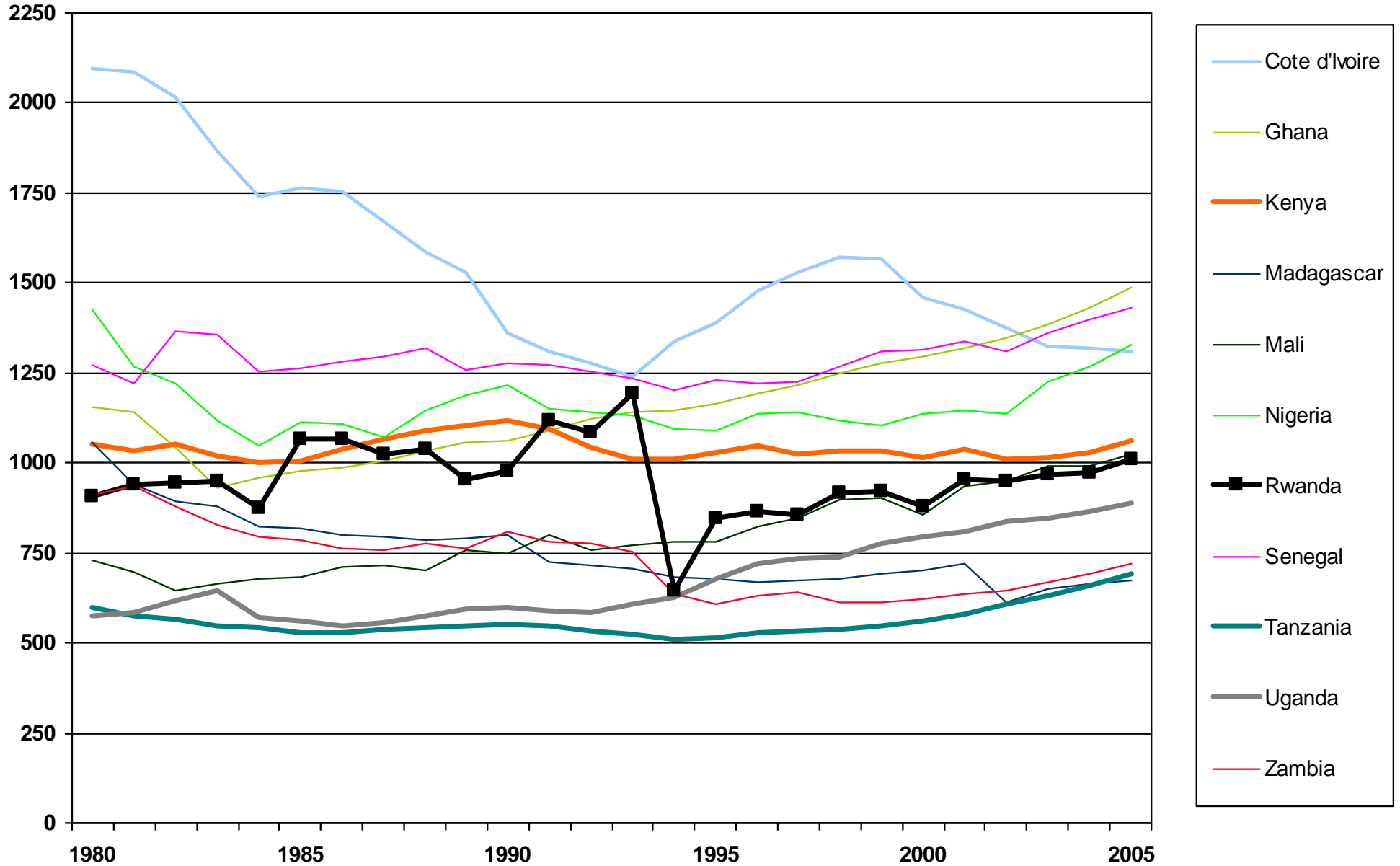
# Decomposing Prosperity



# Labor Productivity

## Selected Countries

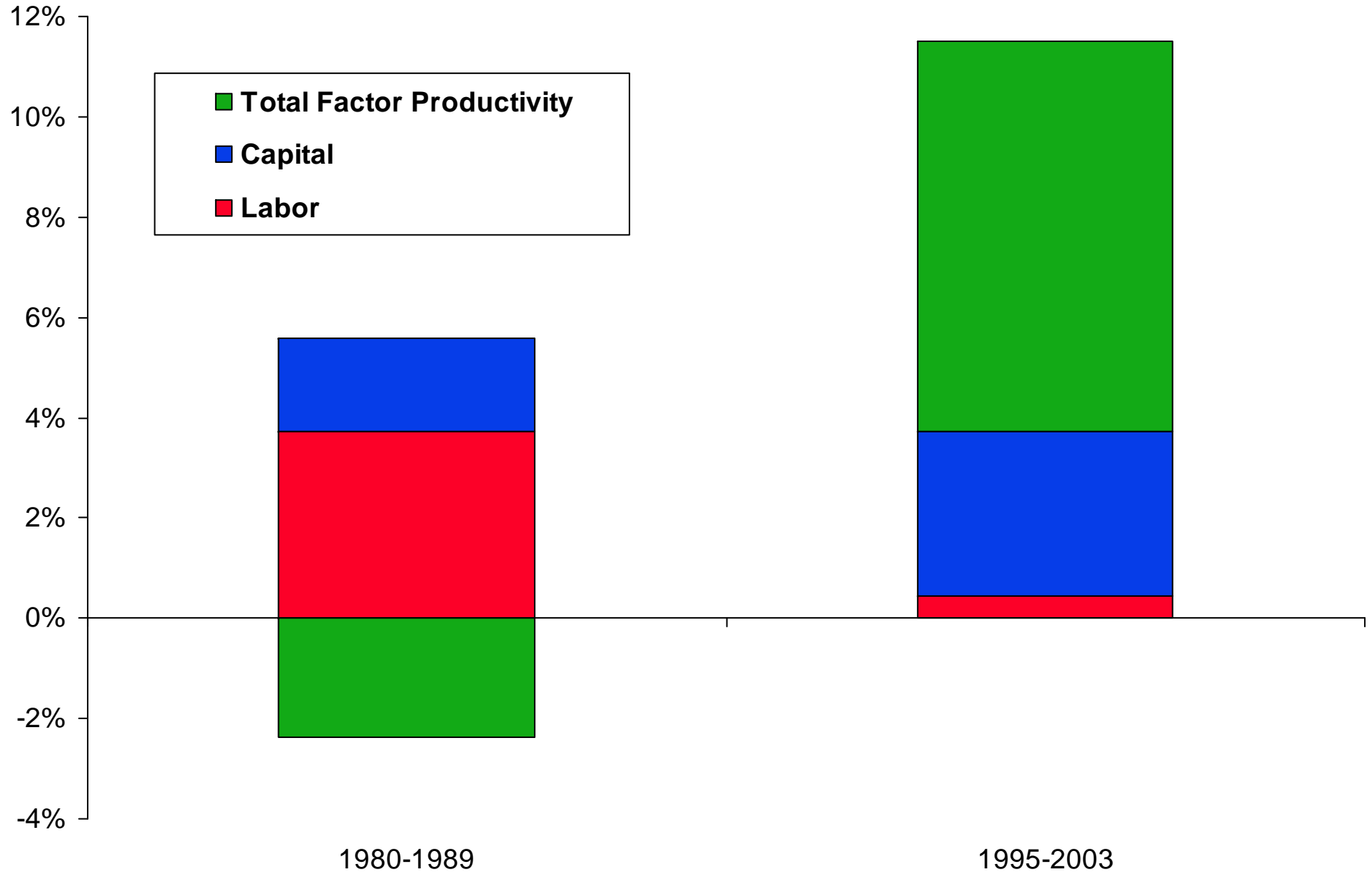
GDP per person  
employed (constant  
1990 PPP \$)





# Decomposition of Rwandan Prosperity Growth

Growth Rate

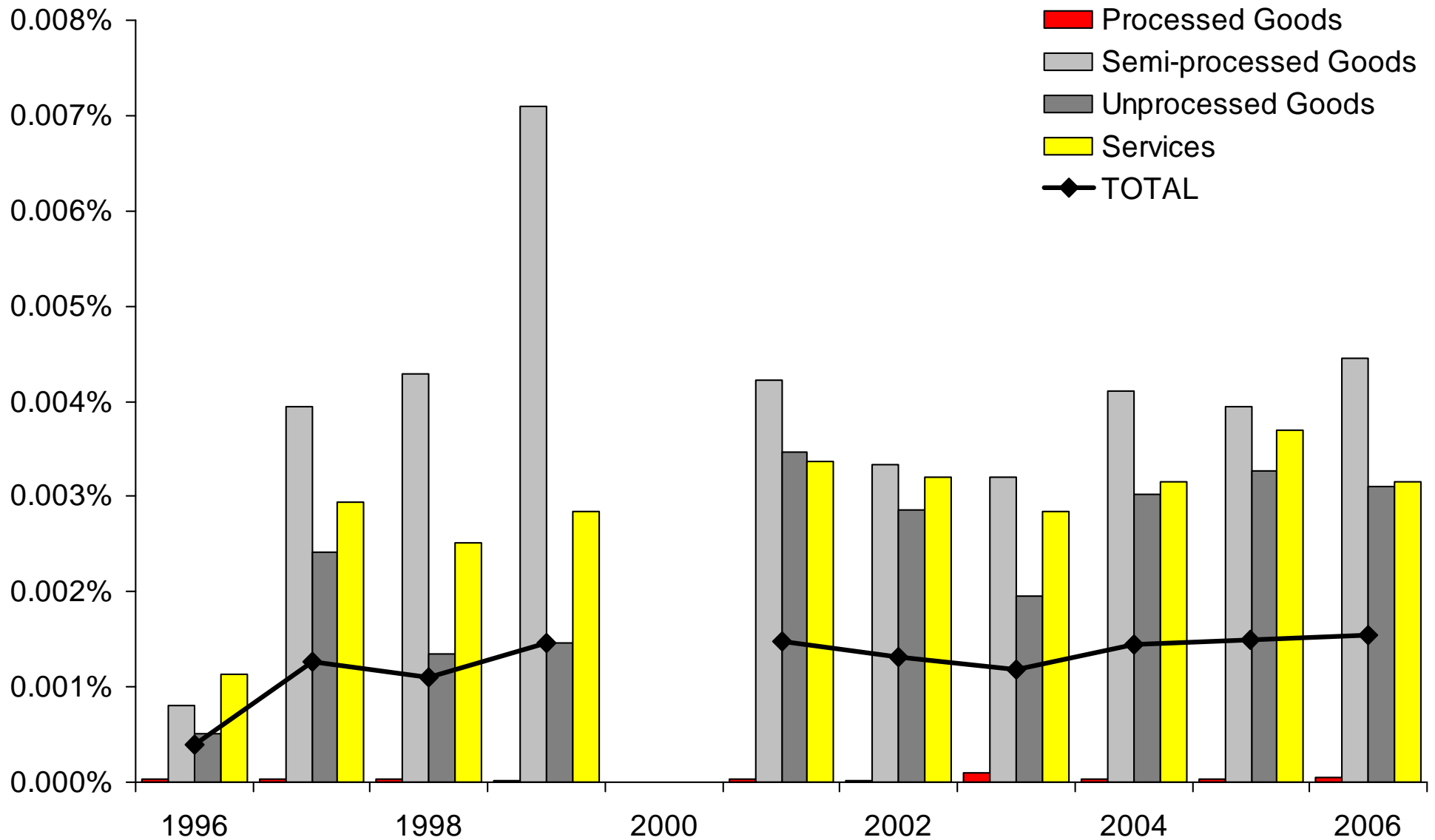


Source: World Bank (2007)

Competitiveness Master - 2008-05-22.ppt

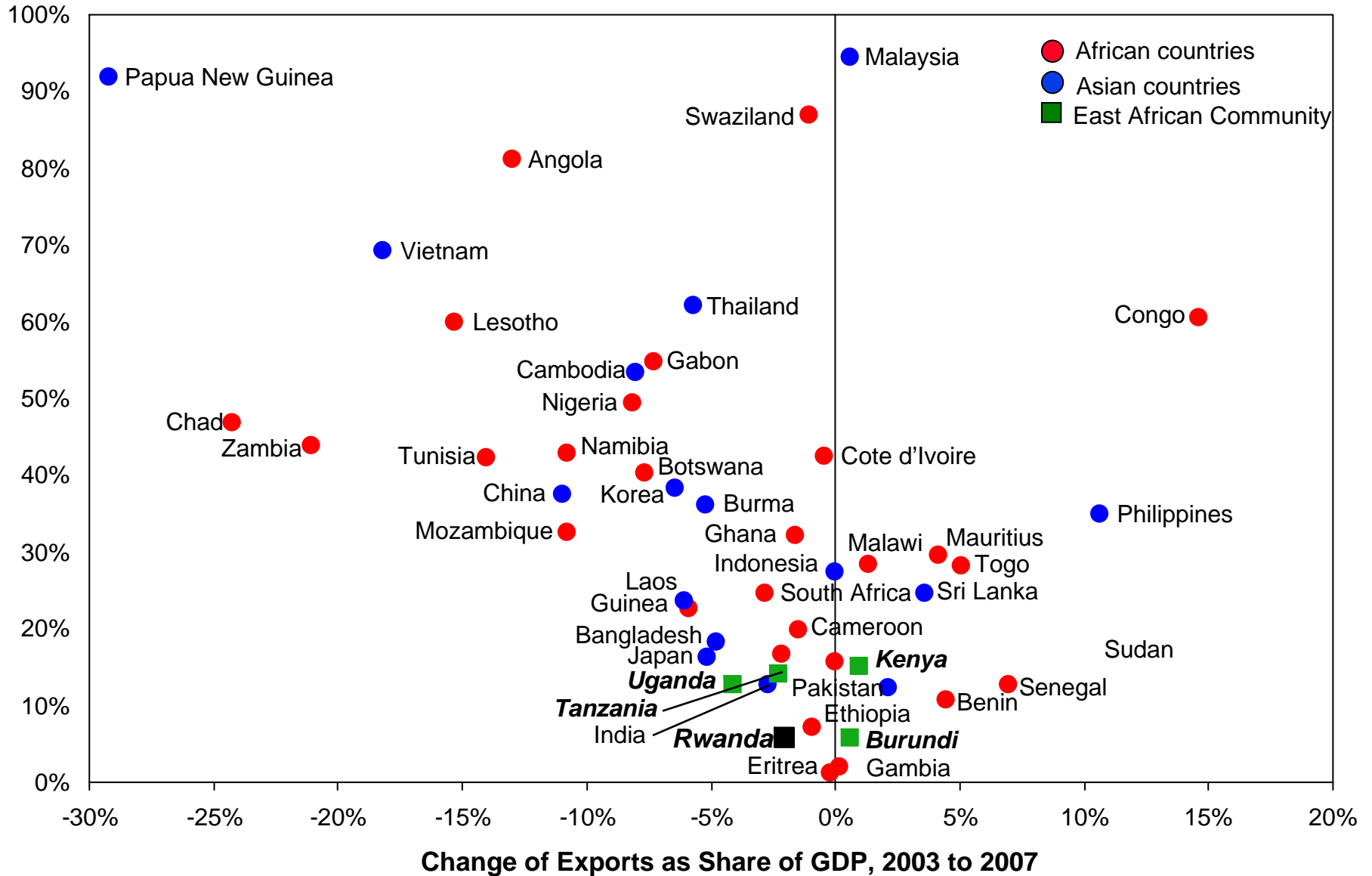
# Rwandan Export Share Trends

World Export Market Share (current USD)



# Export Shares Selected Countries

Exports as Share of  
GDP (in %, 2007)

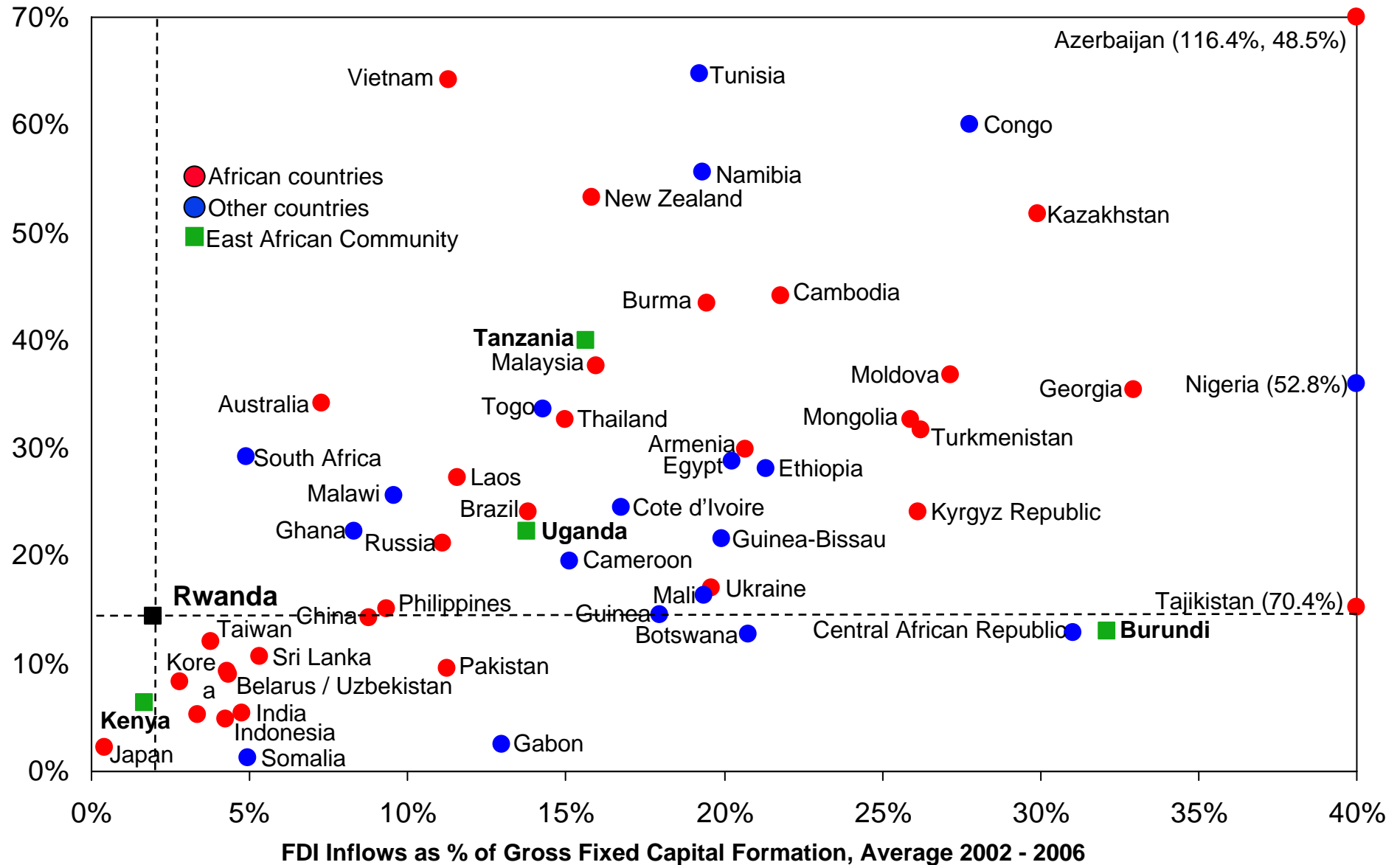


Source: UN Comtrade (2007), authors' analysis

# Inbound Foreign Investment Performance

## Selected Countries

Inward FDI Stocks as %  
of GDP, Average 2002 -  
2006

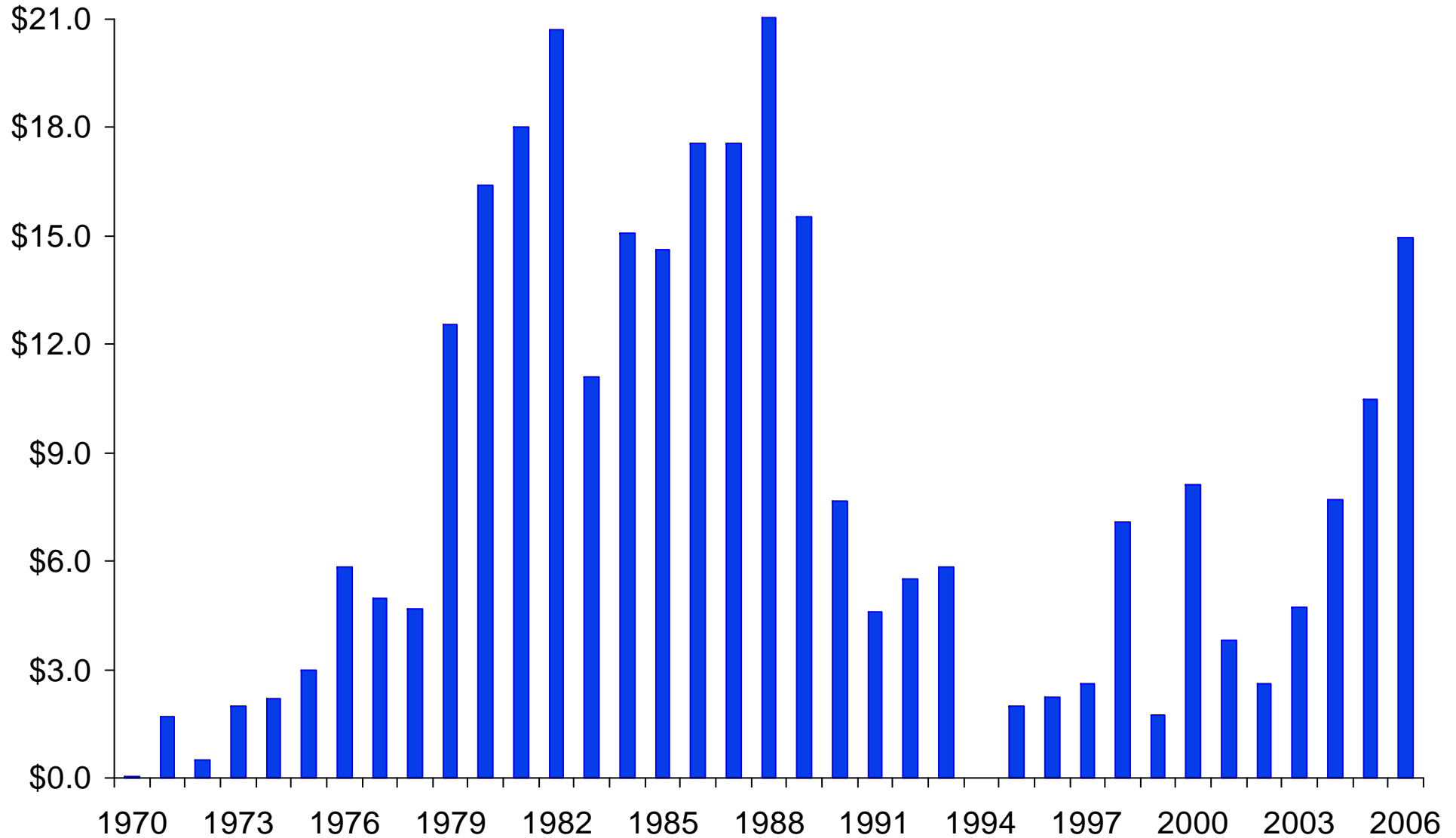


Source: UNCTAD, World Investment Report (2007)

# Inward Foreign Investment Flows

## Rwanda, 1970 - 2006

Inward FDI  
(USD, millions)



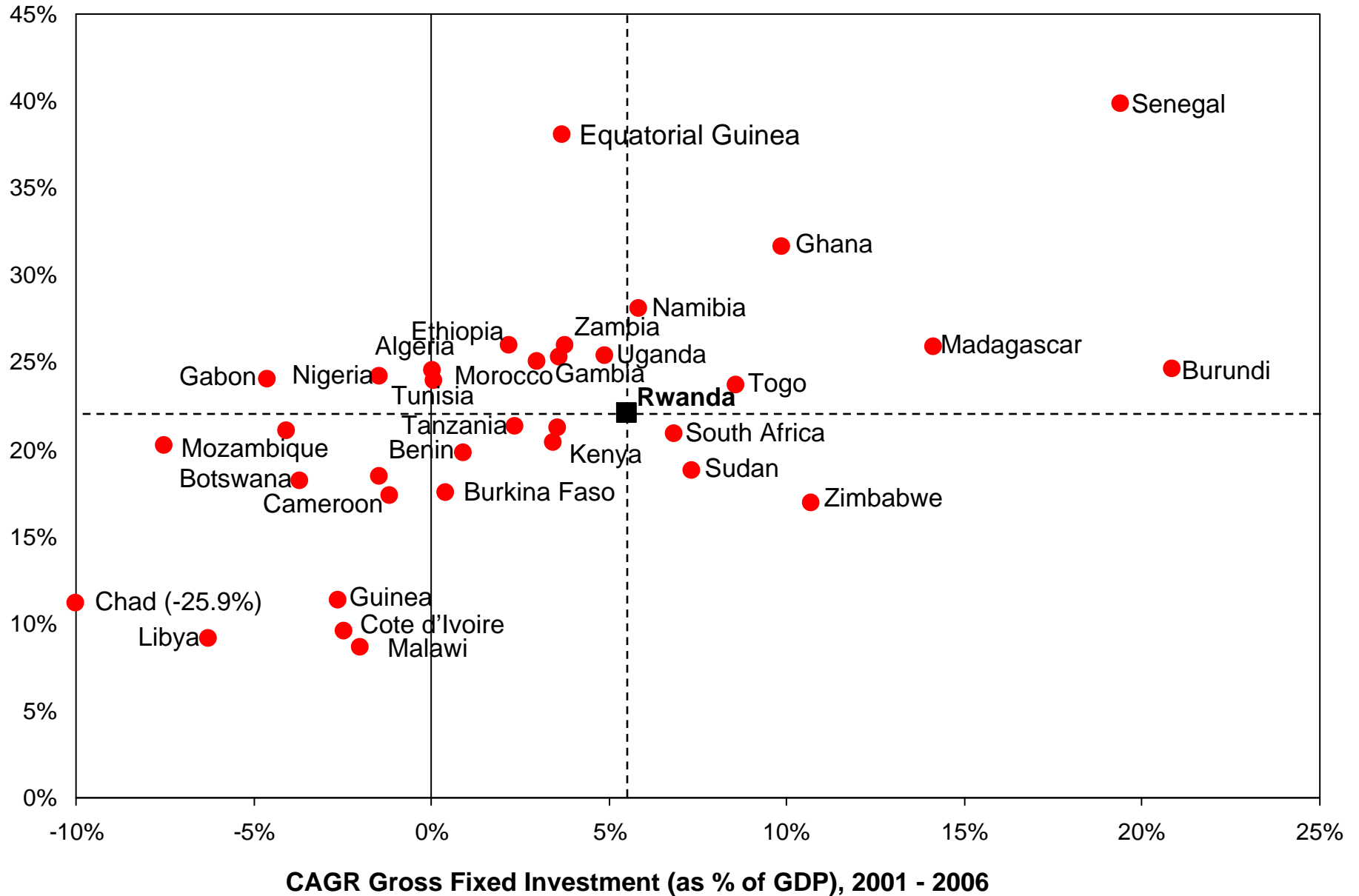
Note: Data not available for 1994.

Source: UNCTAD (2007)

# Fixed Investment Rates

## Selected Countries

Gross Fixed Investment as  
% of GDP (2006)

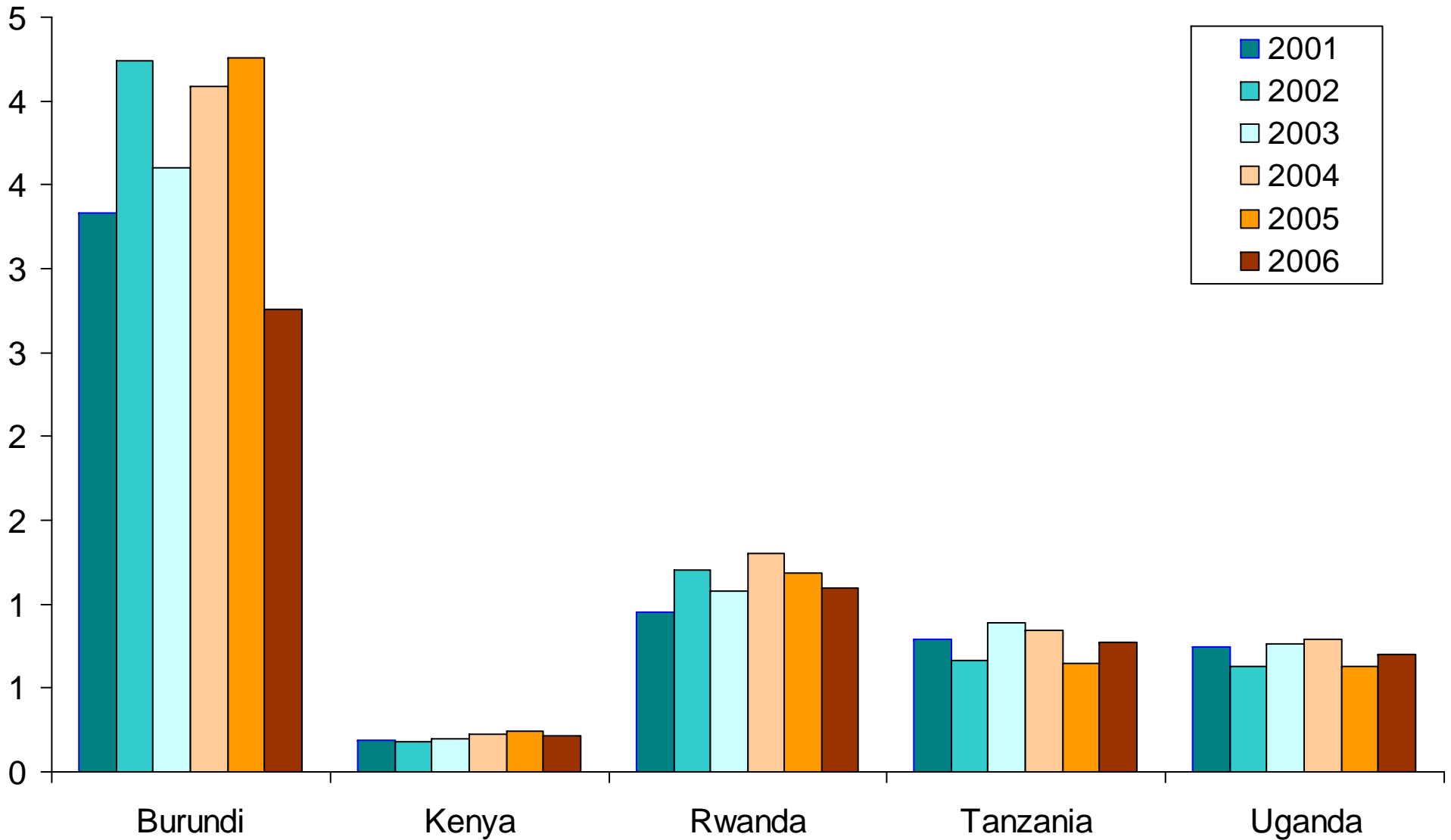


Source: EIU, 2007.

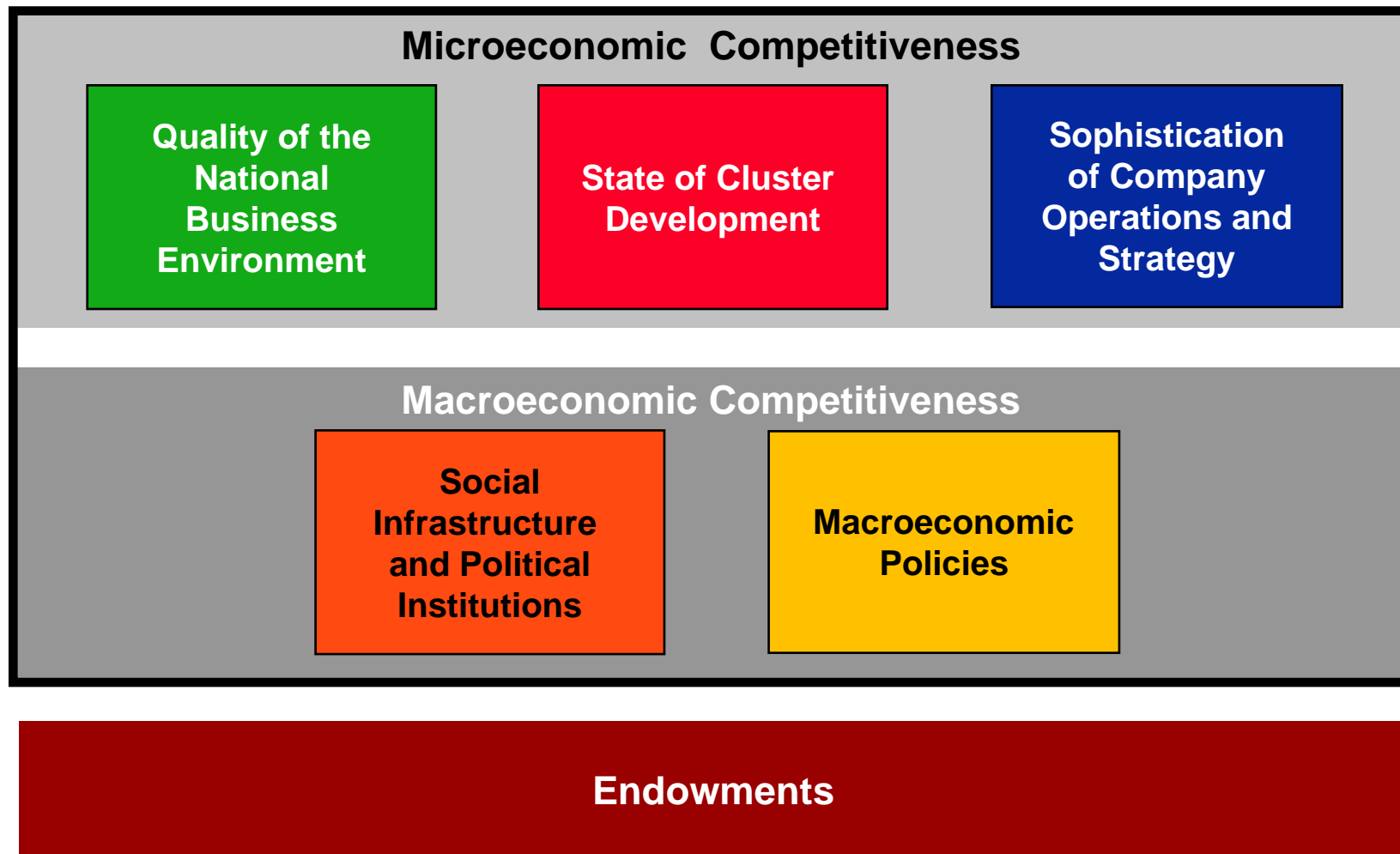
# International Aid and Assistance Flows

## East African Community, 2002 - 2006

Aid as %  
Gross Capital  
Formation



# 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**



# Macroeconomic Competitiveness

## Social Infrastructure and Political Institutions

- **Basic human capacity**
  - Education
  - Health
- **Safety and security**
- **Political institutions**
- **Rule of law**

## Macroeconomic Policies

- **Fiscal policy**
- **Monetary policy**
- **Economic openness**

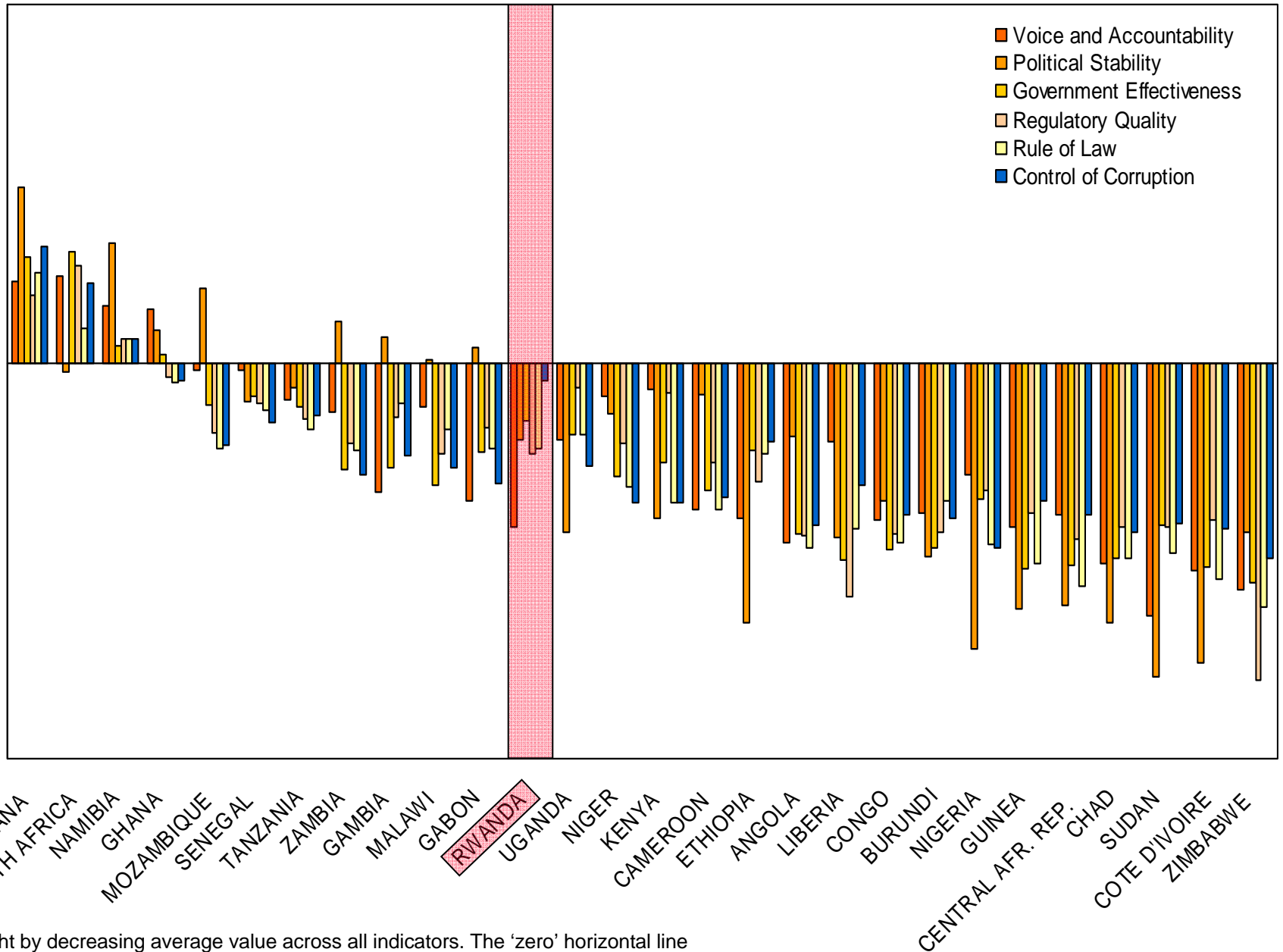
# Governance Indicators

## Selected Countries

Best country in the world

Index of Governance Quality, 2006

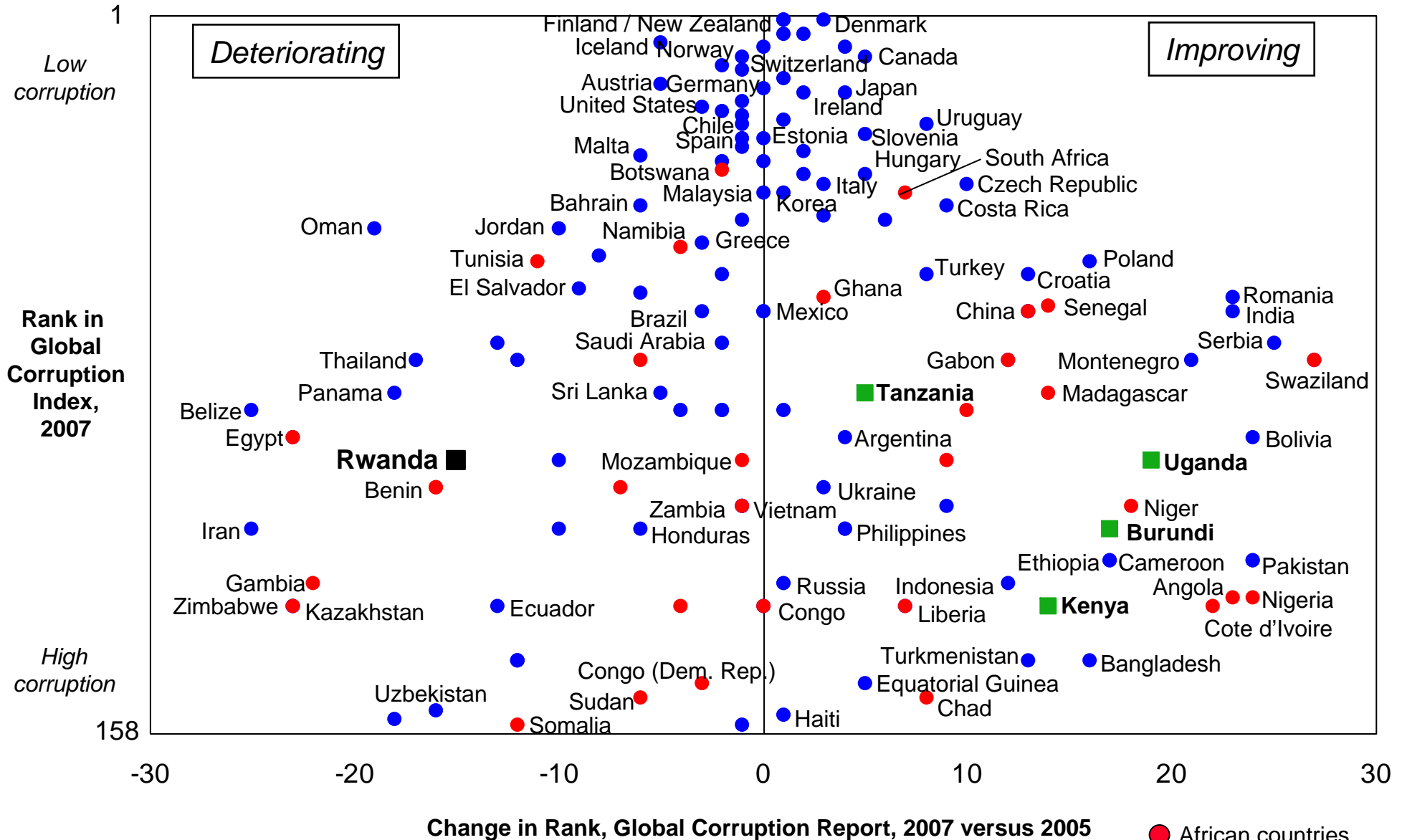
Worst country in the world



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 (2008)

# Corruption Perception Index, 2007

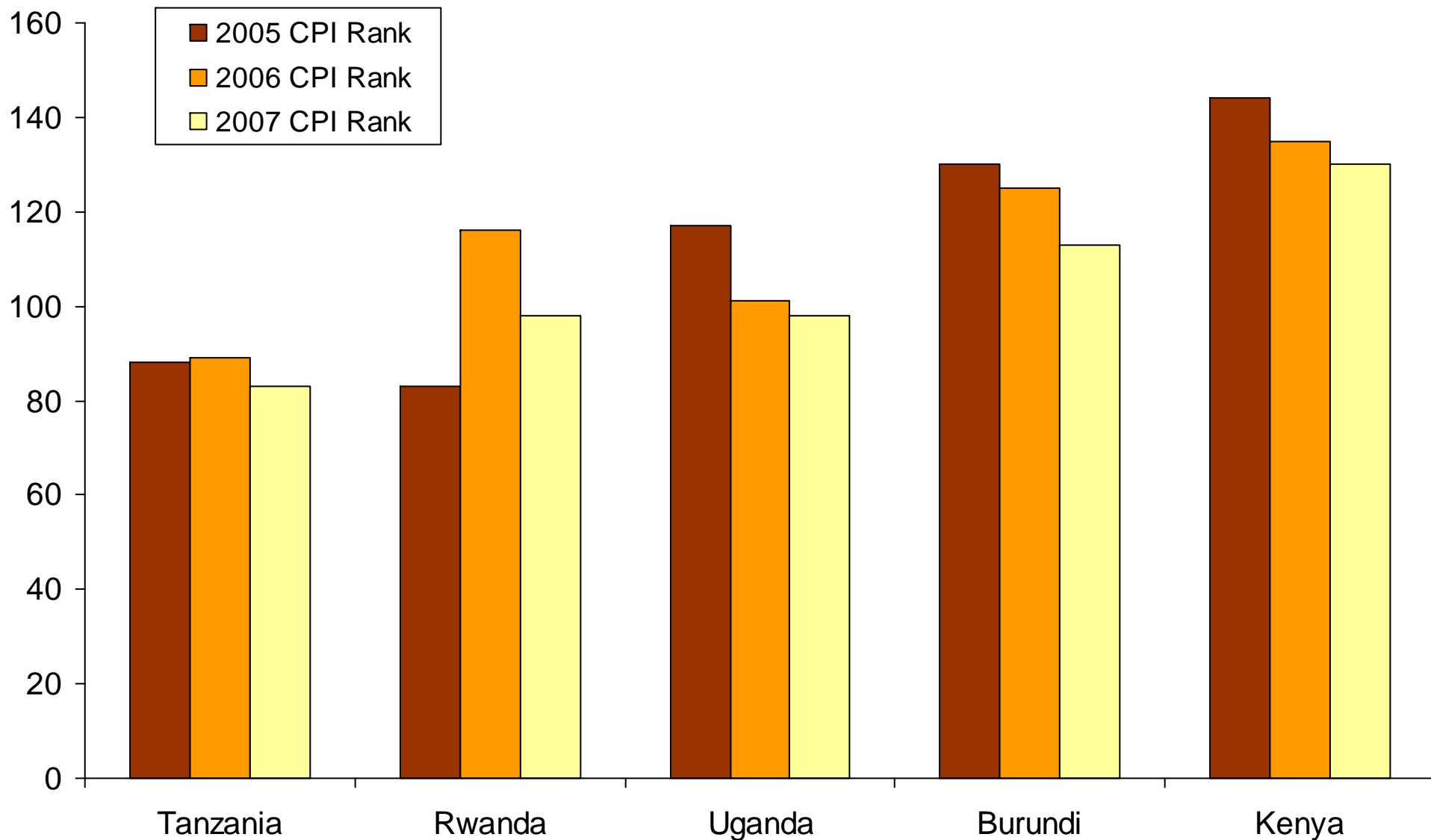


Note: Ranks only countries available in both years (158 countries total)  
 Source: Global Corruption Report, 2007

# Corruption Perception Index

## East African Countries

Ranking (constant sample, 158 countries)

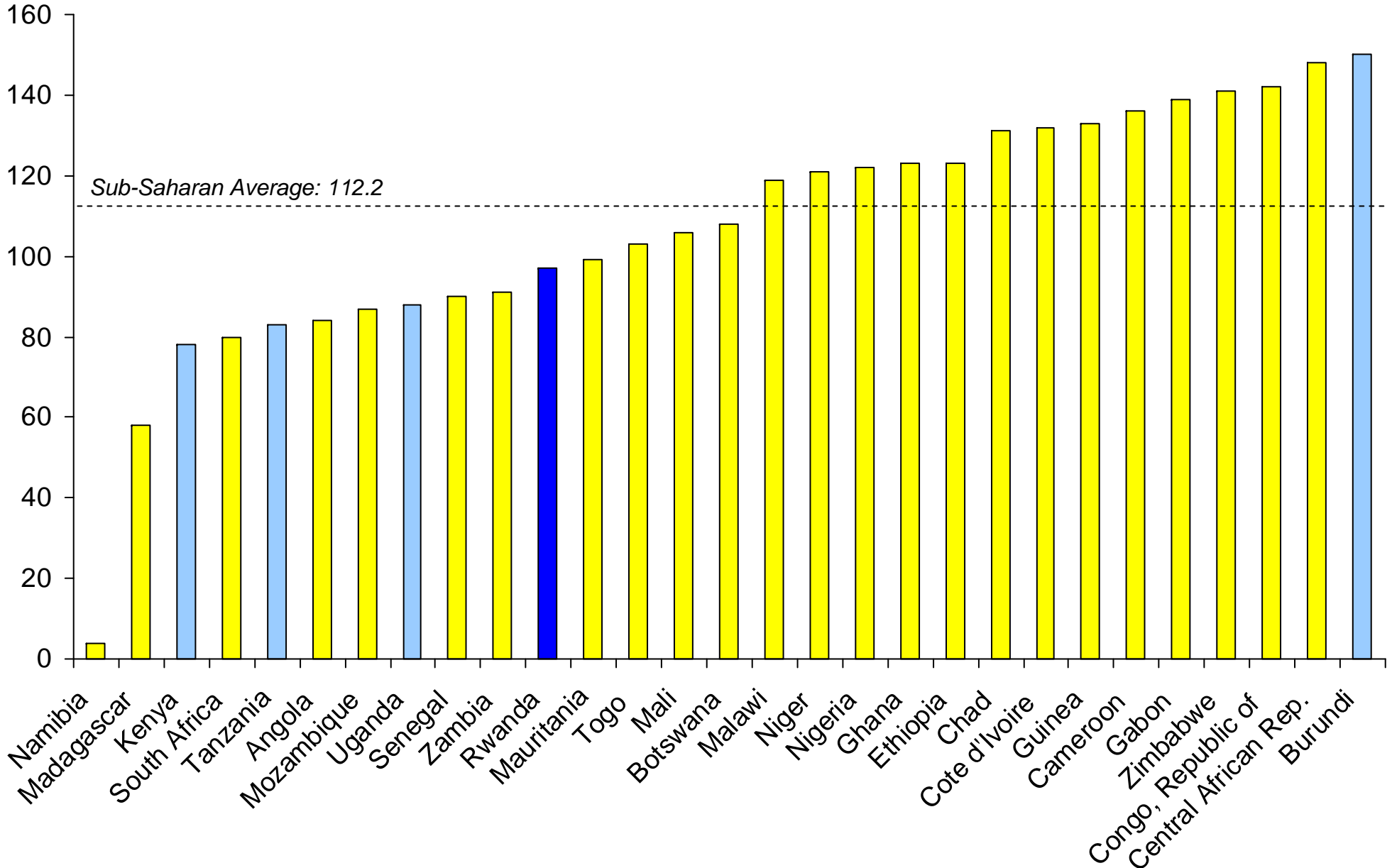


Note: Ranks only available starting in 2005 for all 5 countries  
Source: Global Corruption Report, 2007

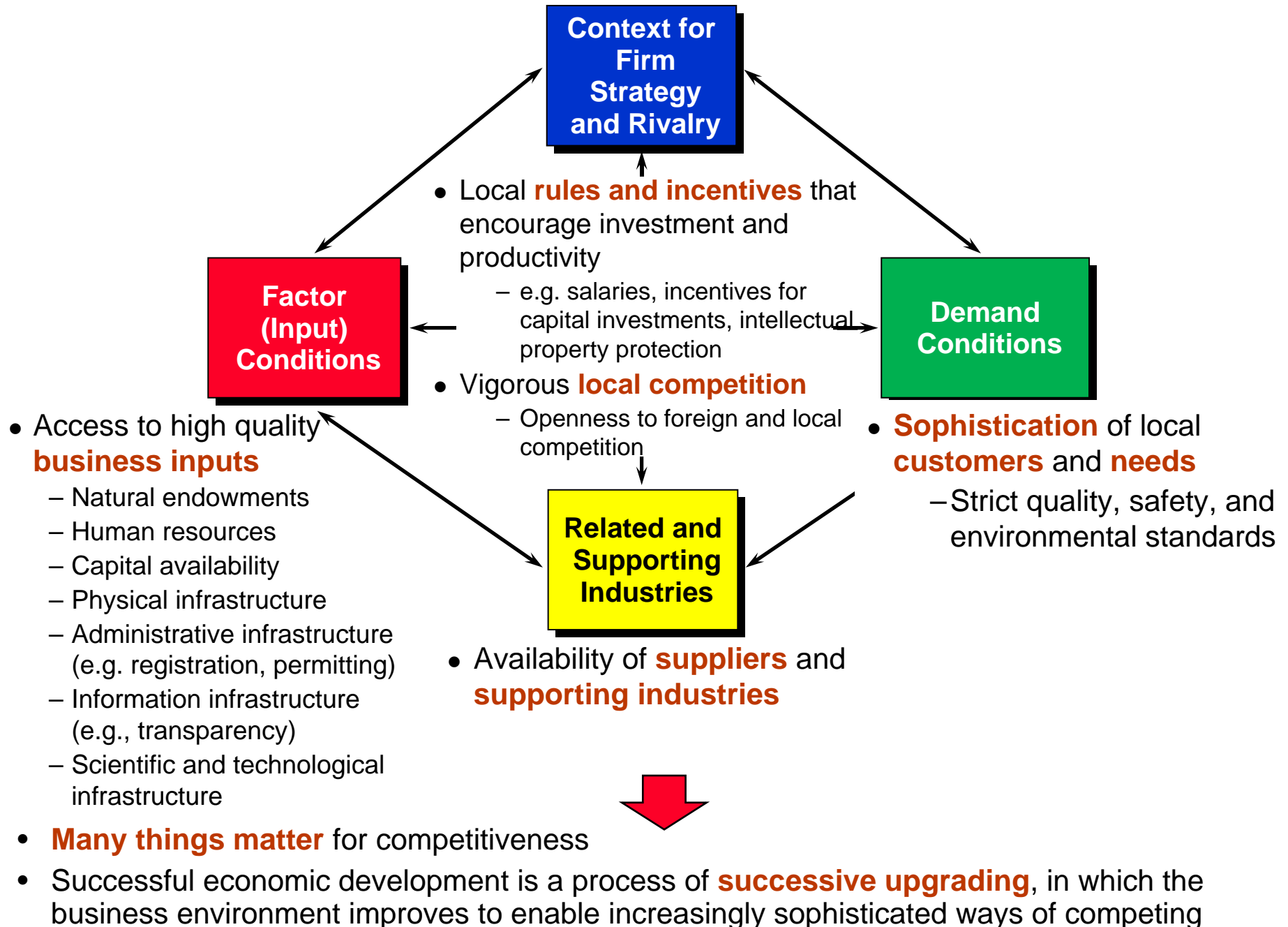
# Openness to Trade

## Selected African Countries, 2008

Rank (157 countries)



# Microeconomic Competitiveness: Quality of the Business Environment

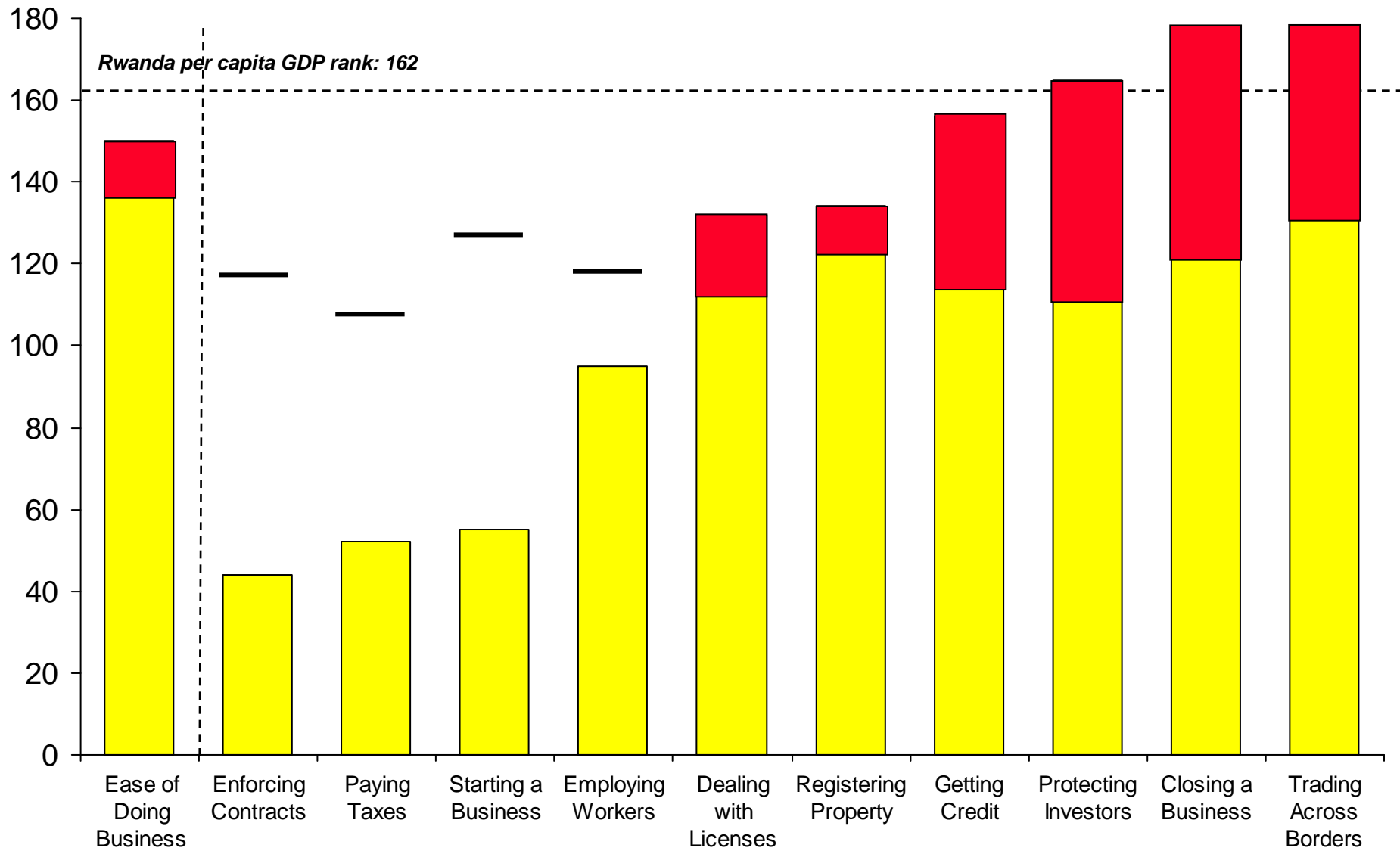


# Ease of Doing Business Rwanda, 2007

Ranking, 2007  
(of 178 countries)

**Favorable**

**Unfavorable**



Ease of Doing Business    Enforcing Contracts    Paying Taxes    Starting a Business    Employing Workers    Dealing with Licenses    Registering Property    Getting Credit    Protecting Investors    Closing a Business    Trading Across Borders

— Median Ranking, Africa

# Doing Business

## Selected African Countries

	Ease of Doing Business	Starting a Business	Dealing with Licenses	Employing Workers	Registering Property	Getting Credit	Protecting Investors	Paying Taxes	Trading Across Borders	Enforcing Contracts	Closing a Business
South Africa	35	53	45	91	76	26	9	61	134	85	68
Namibia	43	101	31	33	128	36	64	48	144	33	47
Botswana	51	99	122	70	36	26	107	14	145	95	26
Kenya	72	112	9	66	114	13	83	154	148	107	76
Ghana	87	138	140	138	26	115	33	75	61	51	96
Ethiopia	102	106	58	89	147	97	107	29	150	77	70
Nigeria	108	80	161	30	173	84	51	107	138	93	89
Zambia	116	82	148	121	125	97	64	30	160	86	84
Uganda	118	114	81	11	163	158	122	55	141	119	48
Malawi	127	108	117	90	87	84	64	78	161	135	135
Tanzania	130	95	170	151	160	115	83	104	100	35	109
Gambia	131	94	70	29	133	135	165	173	73	61	116
Mozambique	134	125	147	162	126	97	33	72	140	138	134
Gabon	144	147	44	163	148	115	147	93	106	145	130
Madagascar	149	61	139	150	165	176	51	86	126	151	178
<b>Rwanda</b>	<b>150</b>	<b>63</b>	<b>124</b>	<b>95</b>	<b>137</b>	<b>158</b>	<b>165</b>	<b>50</b>	<b>166</b>	<b>44</b>	<b>178</b>
Benin	151	137	123	115	105	115	147	161	124	166	106
Zimbabwe	152	143	172	123	79	97	107	144	169	74	151
Cameroon	154	160	154	120	134	115	107	166	132	172	92
Togo	156	176	143	146	150	135	138	138	81	153	90
Mauritania	157	167	142	117	52	115	141	171	152	89	143
Mali	158	149	101	88	90	135	147	151	162	157	107
Burkina Faso	161	105	169	152	170	115	138	133	170	109	91
Senegal	162	159	64	160	155	135	158	164	136	148	73
Guinea	166	171	158	99	151	135	165	163	102	127	111
Angola	167	173	136	172	166	84	51	120	164	176	138
Niger	169	153	155	161	63	135	147	115	163	132	133
Chad	173	177	68	135	123	135	122	124	157	167	178
Burundi	174	124	171	99	122	170	147	109	167	148	178
Congo, Republic of	175	154	67	167	168	115	147	176	171	156	110
Central African Rep.	177	139	133	149	95	115	122	175	172	169	178
<b>African Average</b>	<b>133.625</b>	<b>126.875</b>	<b>111.275</b>	<b>113.05</b>	<b>125.05</b>	<b>109.425</b>	<b>110.325</b>	<b>105.075</b>	<b>131.375</b>	<b>113</b>	<b>115.65</b>

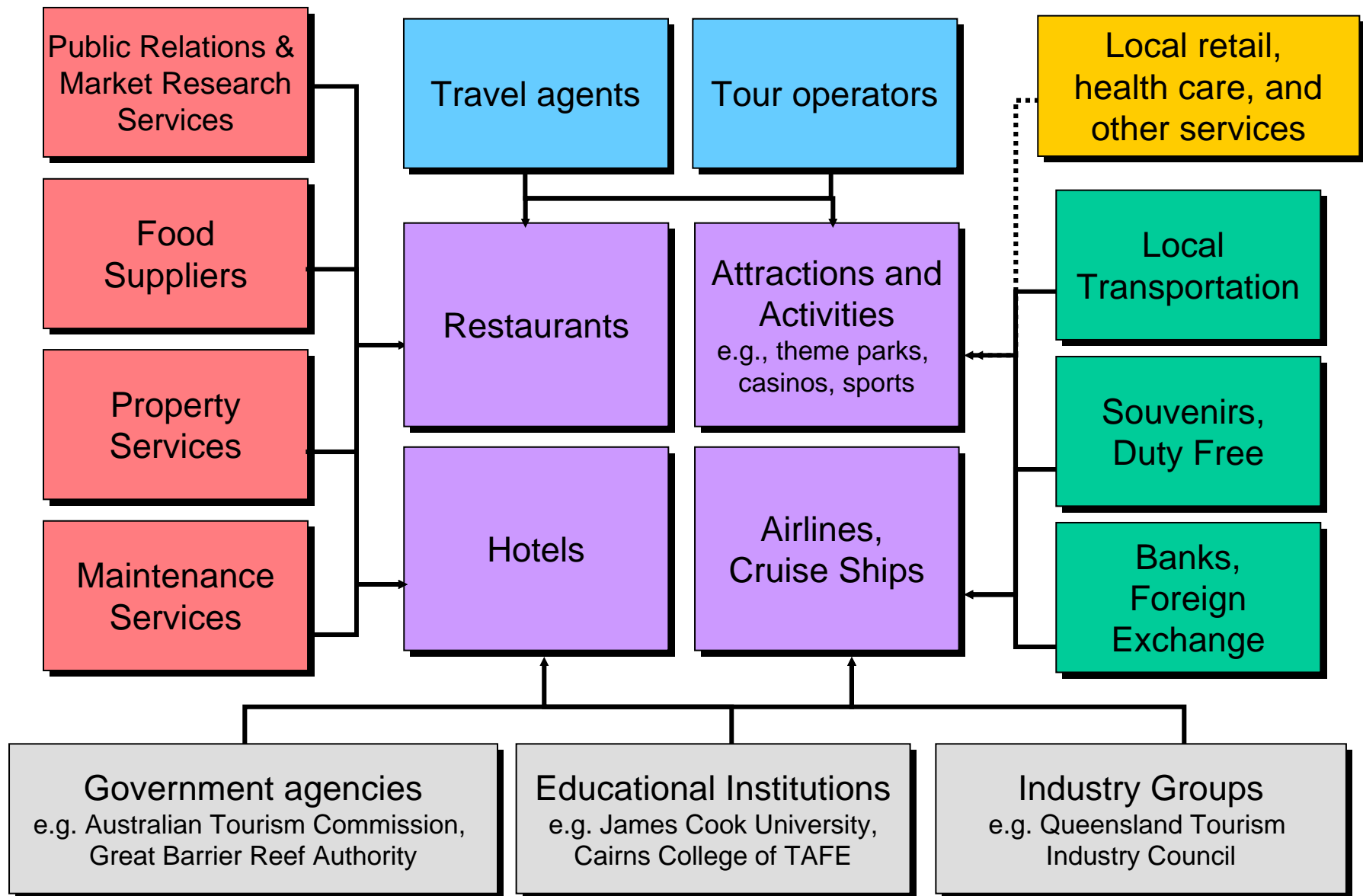
Rank out of 178 countries. East African countries highlighted.

Source: World Bank Doing Business (2008).



# Microeconomic Competitiveness: State of Cluster Development

## Tourism Cluster in Cairns, Australia



# Institutions for Collaboration

## Selected Massachusetts Organizations, Life Sciences

### Industry / Cluster Associations

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

### University – Company Initiatives

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

### Broader Business Associations

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

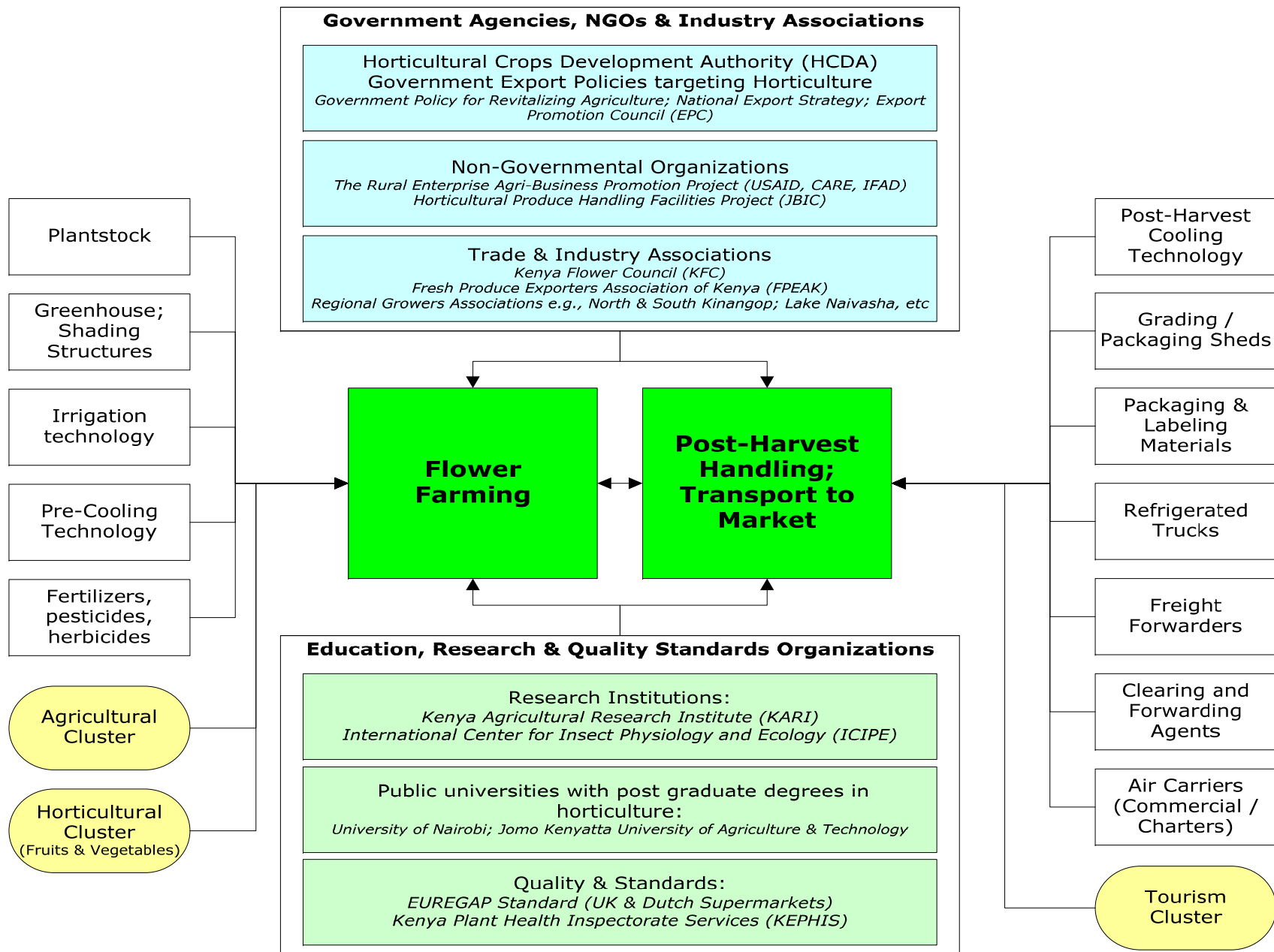
### Informal networks

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

### Joint Research Initiatives

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

# Kenya's Cut Flower Cluster

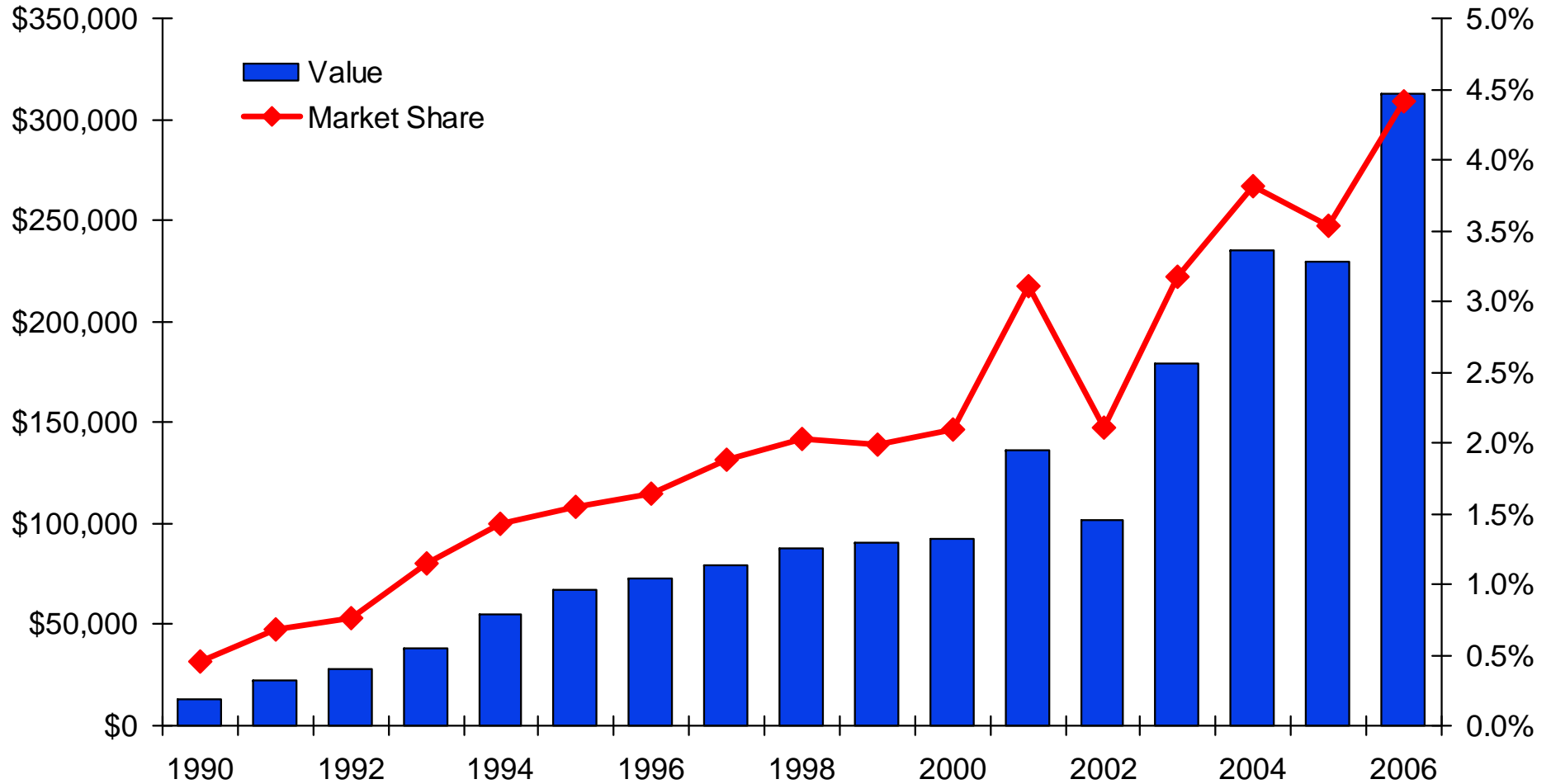


# The Kenyan Cut Flower Cluster

## Trade Performance

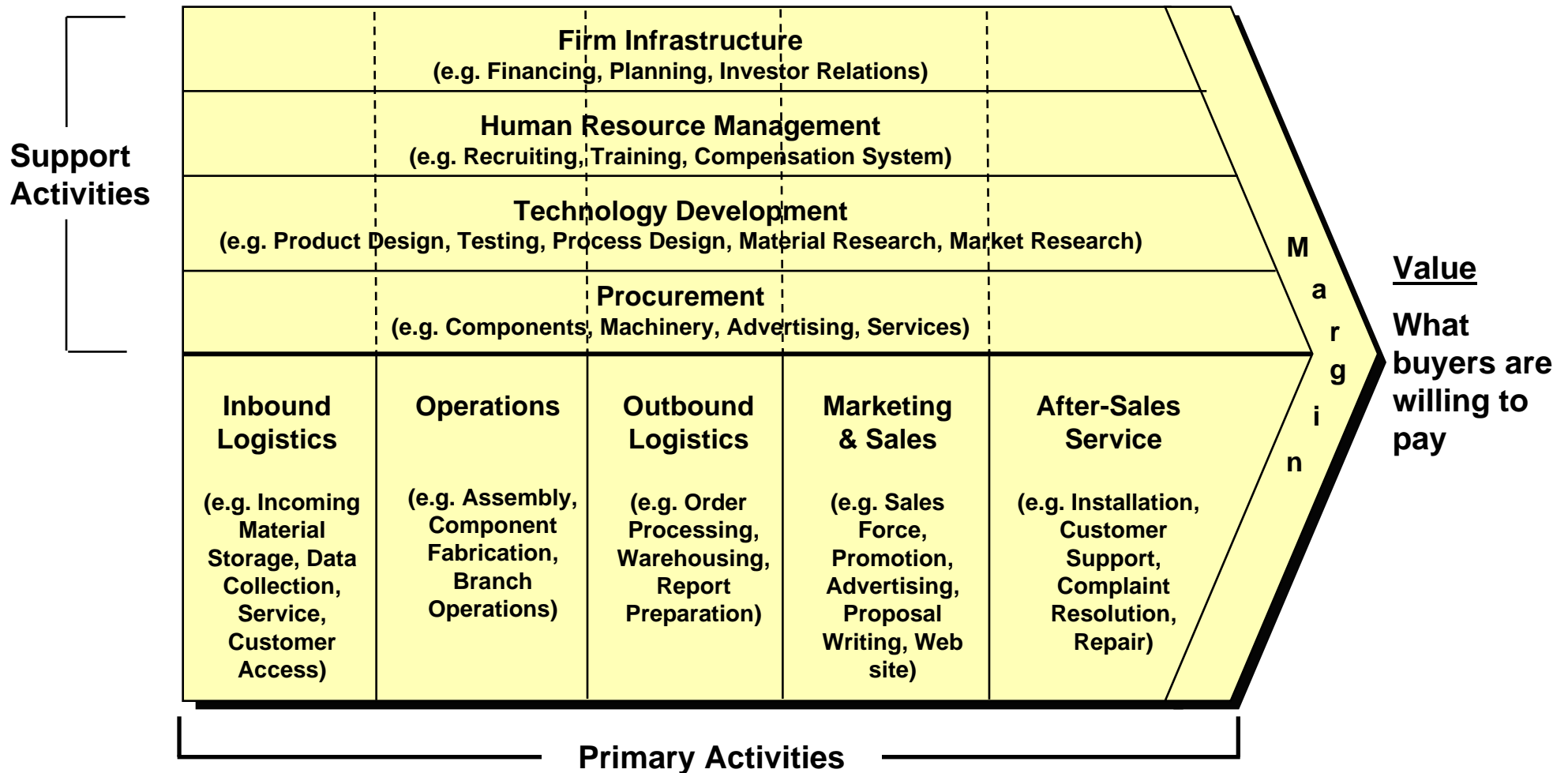
Kenyan Cut Flower Exports in thousand US \$

Kenyan Cut Flower World Export Market Share



Source: 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.

# Microeconomic Competitiveness: Company Sophistication



- Competitiveness requires that local companies upgrade the quality of the value chain

# Company Sophistication: Measures from the Global Competitiveness Report

## Strategy and operational effectiveness

- Nature of competitive **advantage**
- **Production process** sophistication
- Degree of **customer** orientation
- Extent of **marketing**
- Value chain **breadth**
- Company spending on **research and development**
- Capacity **for innovation**

## Internationalization of Firms

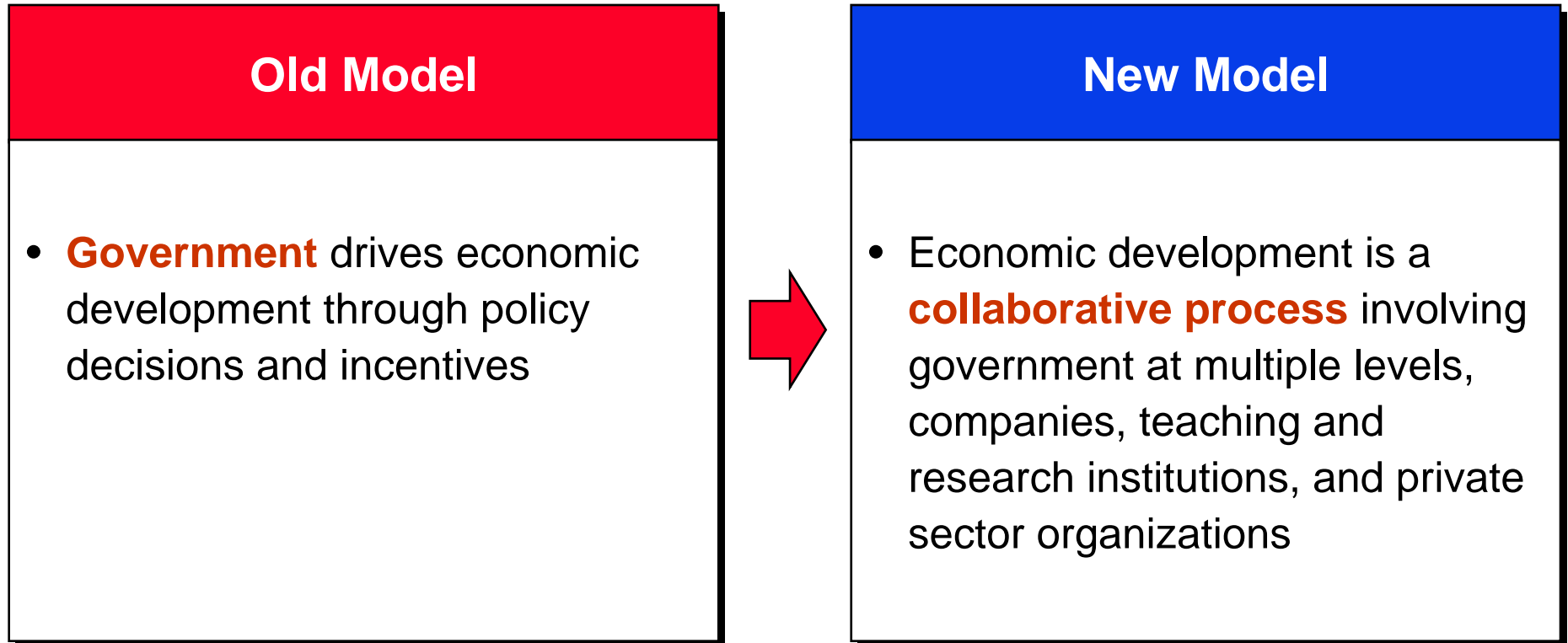
- Extent of **regional** sales
- **Breadth** of international markets
- Control of international **distribution**
- Prevalence of foreign **technology licensing**

## Organizational Practices

- Reliance on **professional** management
- Willingness to **delegate** authority
- Extent of staff **training**
- Performance-based **compensation**

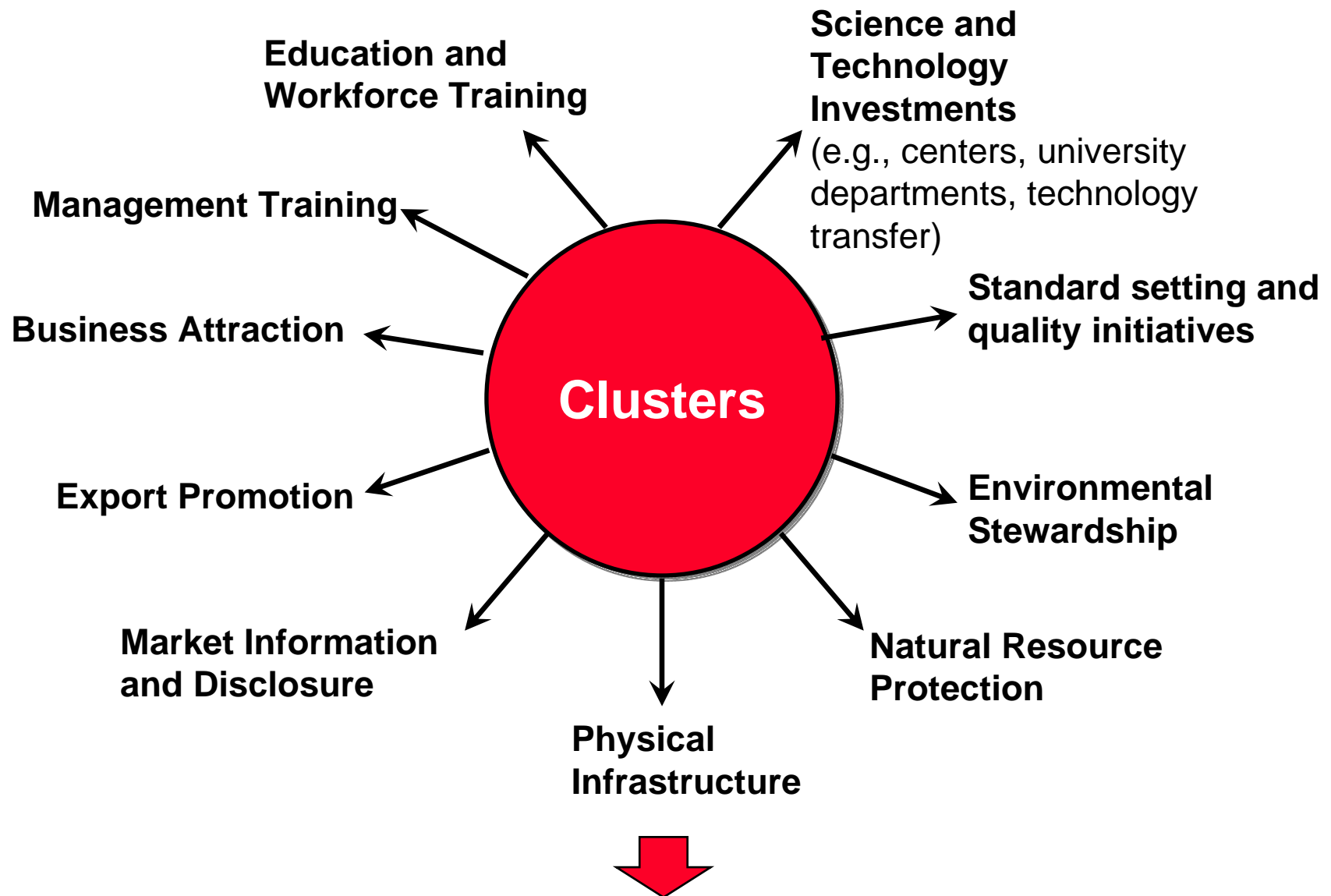
# The Process of Economic Development

## Shifting Roles and Responsibilities



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

# Clusters and Economic Policy



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



# 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

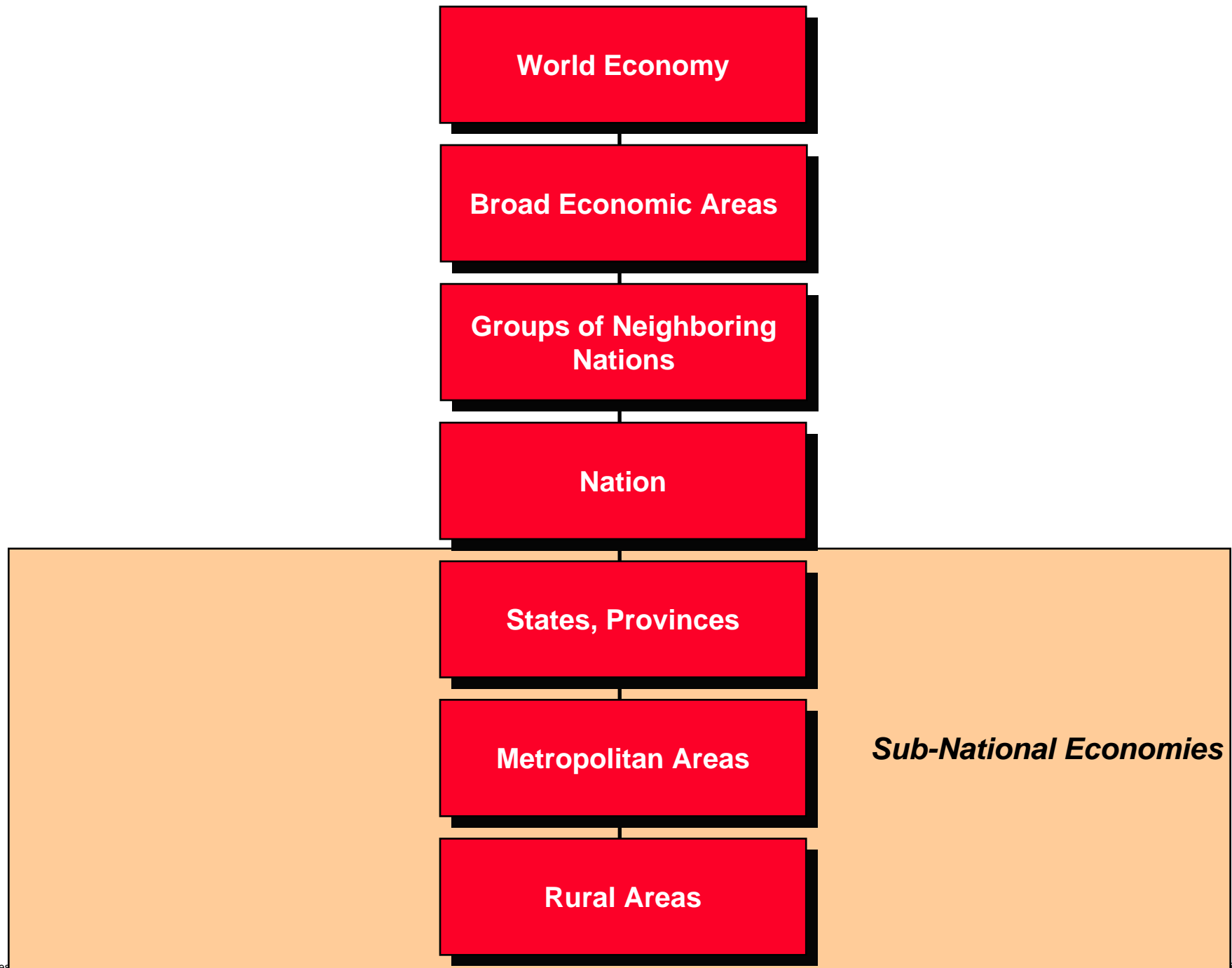


- Take an **active role** in upgrading the local infrastructure
- Nurture **local suppliers** and attract foreign suppliers
- Work closely with local **educational and research institutions**, to upgrade their **quality and create specialized programs addressing the cluster's needs**
- Inform government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

# Geographic Influences on Competitiveness

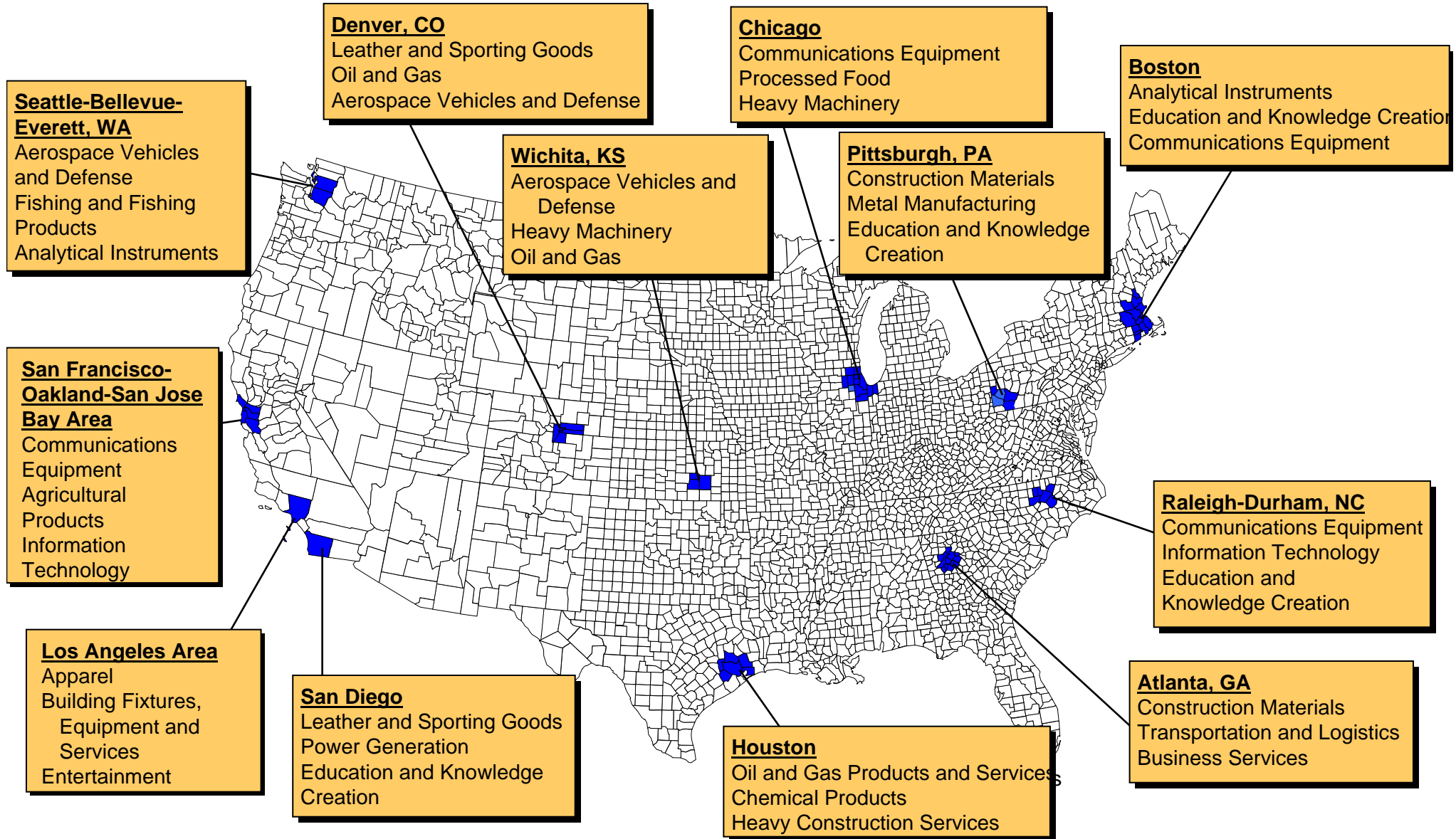






# Specialization of Regional Economies

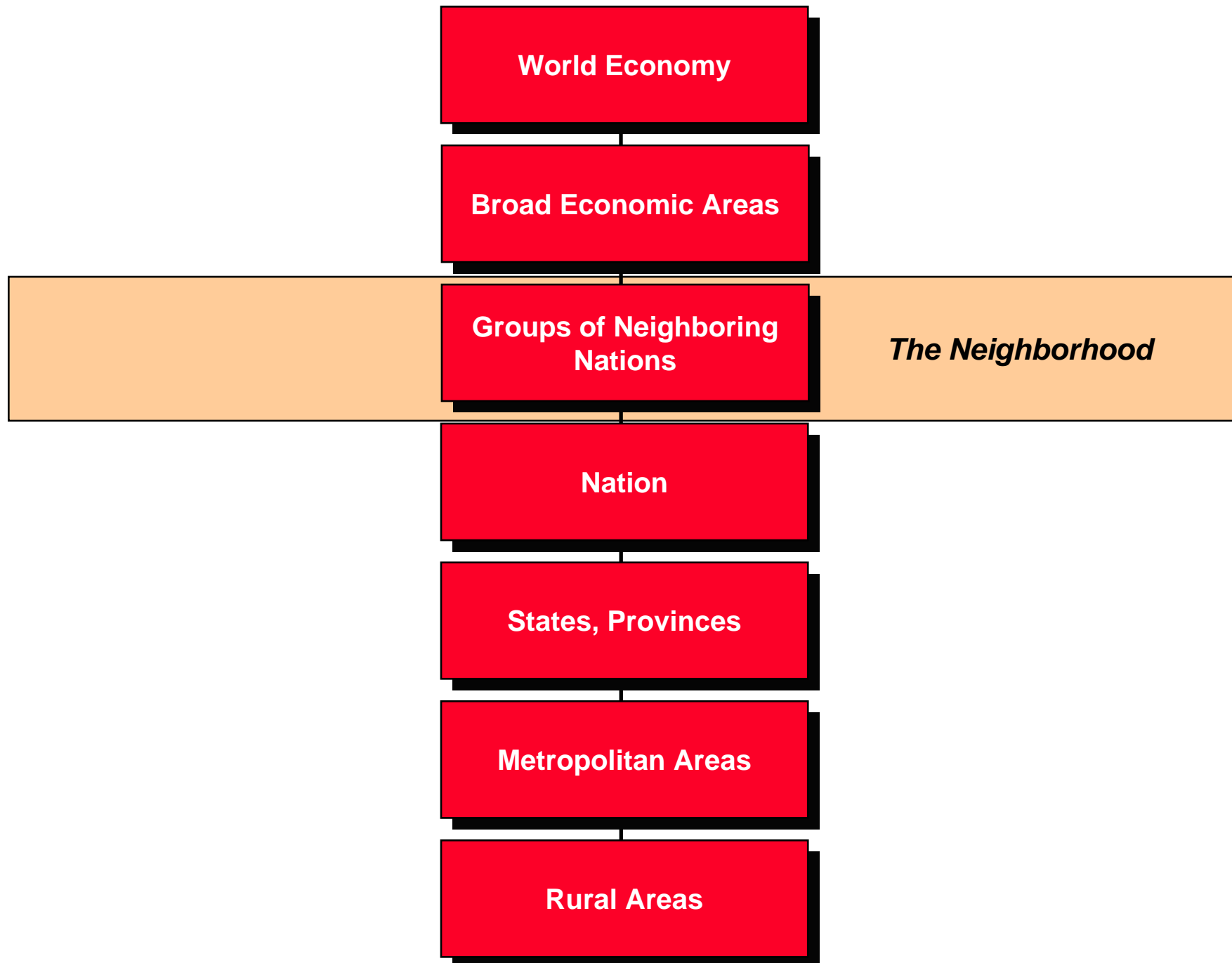
## Selected U.S. Geographic Areas



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

Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School, 11/2006.

# Geographic Influences on Competitiveness





# The Neighborhood

## East Africa



- Economic coordination among neighboring countries can significantly enhance competitiveness
- Integration with neighbors offers greater opportunities than participation in broader economic forums

# Regional Economic Strategy

- Defining a strategic role for the region in the continent and the world economy
- Opening internal trade and investment
- Achieving synergies in enhancing the business environment
- Facilitating cross-border cluster development
- Enhancing company capabilities and non-traditional exports



- Raising productivity
- Increasing the attractiveness of the region as a whole for foreign investment
- Winning greater support from the international community
- Accelerating economic policy at the national level

**But**

- Cross-national collaboration is not a substitute for national microeconomic reforms



# Economic Coordination Among Neighbors

## Capturing Synergies

### Factor (Input) Conditions

- Improving regional **transportation infrastructure**
- Creating an efficient **energy** network
- Enhancing regional **communications** and **connectivity**
- Linking **financial markets**
- Opening the movement of students for **higher education**
- Harmonizing administrative **requirements** for businesses

### Context for Strategy and Rivalry

- Eliminating **trade and investment barriers** within the region
- Simplifying and harmonizing **cross-border** regulations and paperwork
- Coordinating **anti-monopoly** and **fair competition policies**

### Demand Conditions

- Harmonizing **environmental standards**
- Harmonizing product **safety standards**
- Establishing reciprocal **consumer protection laws**
- Opening **government procurement** within the region

### Related and Supporting Industries

- Facilitating **cross-border cluster upgrading**, e.g.
  - Tourism
  - Agribusiness
  - Transport & Logistics
  - Business services

### Macro- economic Competitiveness

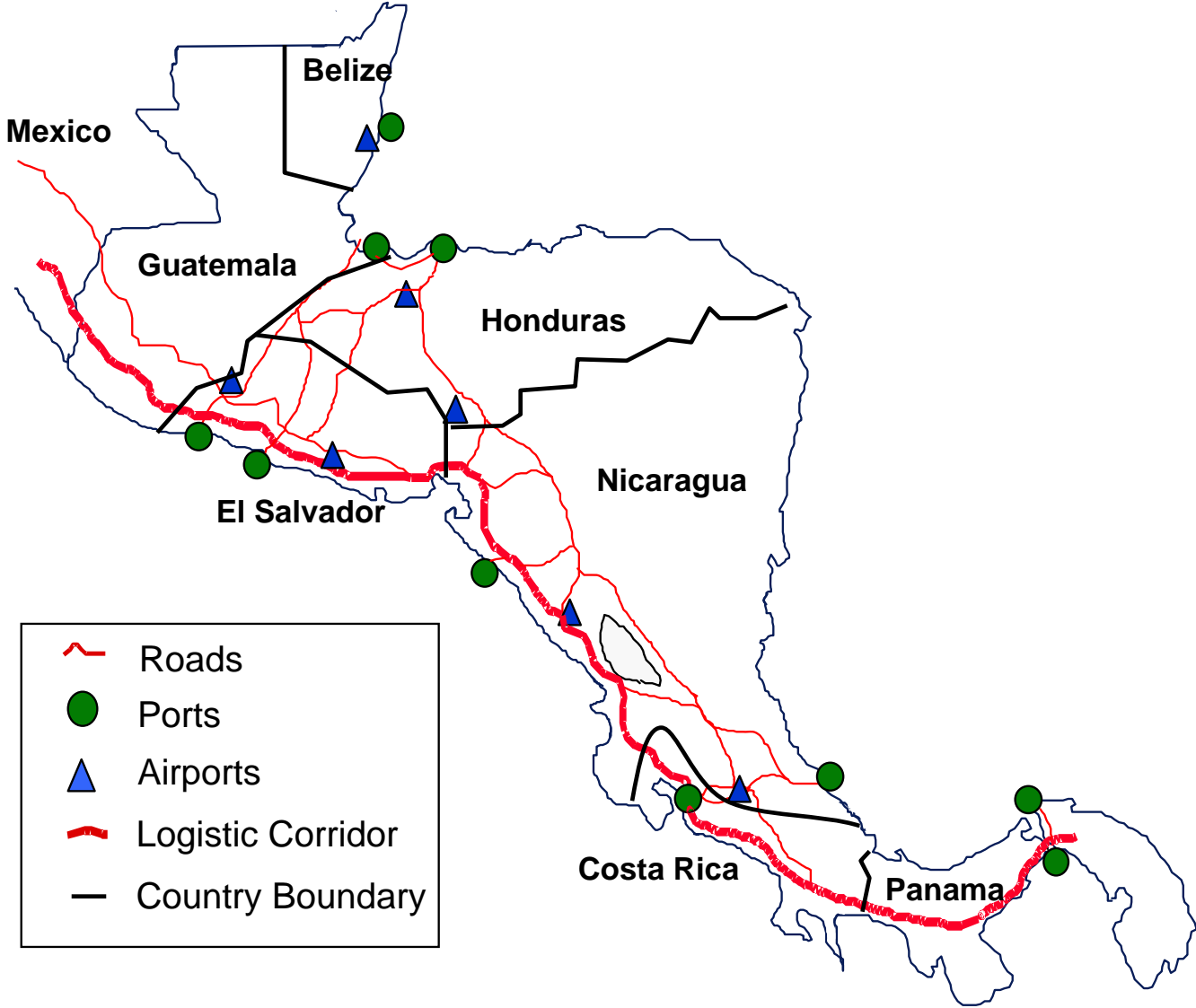
- Coordinating programs to improve **public safety**
- Coordinating **macro-economic** policies

### Regional Strategy & Governance

- Creating a regional strategy and marketing program
- Sharing **best practices** in government operations
- Creating regional **institutions**
  - Dispute resolution mechanisms
  - Regional development bank
- Developing a regional position with **international organizations**

# Strategy for Cross-National Regions

## Central American Logistical Corridor



# Regional Economic Strategy Initiatives

## Success Factors

- Common **understanding of competitiveness**
  - Develop a **regional value proposition** = a strategy
  - Emphasis **microeconomic aspects** of competitiveness, not just macro
  - Focus on **specific projects** and initiatives
  - Led by the **private sector** with the participation of all **regional actors** and representation from the **national governments**
  - Institutionalized through formal **enabling structures**
  - Measure and report **progress**
- 
- Bottoms up, win-win projects, rather than grand political and macroeconomic declarations

# Defining an Economic Strategy

## National Value Proposition

- What is the **unique competitive position** of the nation or region 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 macroeconomic competitiveness** and the **business environment** are 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?

- Priorities and sequencing are necessity in economic development

# Toward A Rwandan Economic Strategy

## What is Unique about Rwanda?

- Low corruption
- Stable
- Secure and safe
- Clean
- Responsive
- Integrated economic and social development
- Unique climate and growing conditions
- Central location on the African continent
- Established positions in tea, coffee, tourism
- Opportunity to lead the region in ICT and services
- Social innovator in health, education, reconciliation, gender equality, and other areas
- Disproportionate external interest in the country

## Some Implications

- Rwanda must maintain stability, safety, orderliness, and lack of corruption at all costs
- Rwanda must accelerate improvement of skills and business infrastructure, managerial skills, ease of doing business
- Kigali must become a vibrant capital city
- Rwanda should seize the opportunity to transform agriculture
- Rwanda is unlikely to be competitive in exporting bulky goods with low value-to-weight
- Rwanda should develop air freightable goods and services exports to nullify its logistical disadvantages
  - eg, silk, flowers
- Rwanda is inextricably linked with its neighbors



- A new model of African development

# Rwanda's Competitiveness Agenda

## Business Environment

- Land use
- Physical infrastructure
  - Airport / air service
  - Connectivity
  - Economic zones
- Energy
  - Renewable
- Skills development
- Build towns and increase urbanization outside of Kigali
- Institutional capacity building
- Improve government efficiency and cross agency coordination

## Cluster Development

- Activate a formal cluster development program led by the private sector
- Established clusters
  - Tea
  - Coffee
  - Tourism
  - Mining
- Emerging clusters
  - Logistics and transport
  - Construction and real estate
  - ICT services
  - Specialty agriculture (e.g., silk, flowers)
  - Health and other social services
  - Arts and culture (Hillywood)

## Private Sector

- Upgrade private sector capabilities
- Engage the private sector in economic development
- Support cooperative private investment funds to jumpstart the private equity market

## Neighborhood

- Lead economic integration with neighboring countries
  - e.g., Road transportation efficiency
  - Railway development
  - Energy grid