Competitiveness: Creating a Mongolian Economic Strategy

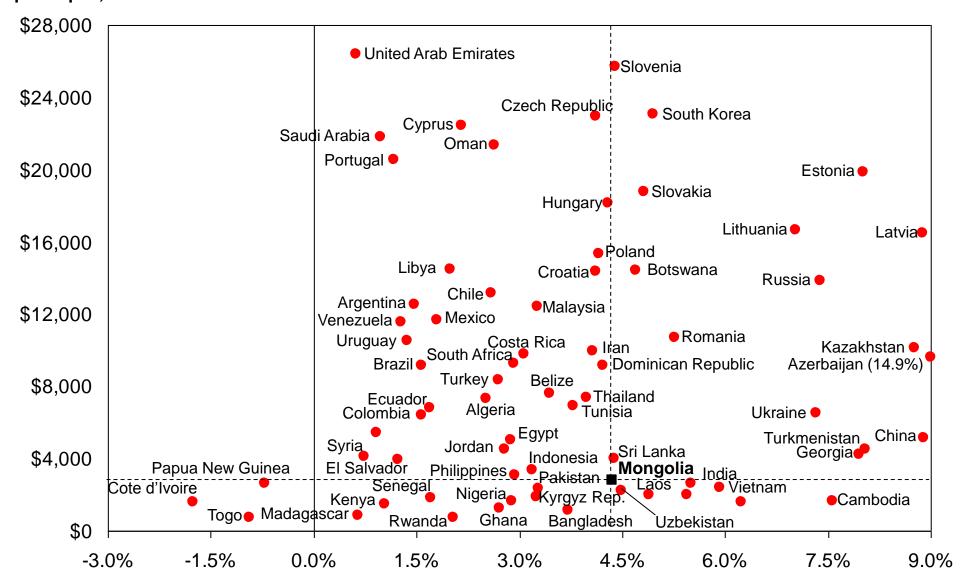
Professor Michael E. Porter Institute for Strategy and Competitiveness Harvard Business School

July, 2008

This presentation draws on ideas from Professor Porter's articles and books, in particular, <u>The Competitive Advantage of Nations</u> (The Free Press, 1990), "Building the Microeconomic Foundations of Competitiveness," in <u>The Global Competitiveness Report 2006</u> (World Economic Forum, 2006), "Clusters and the New Competitive Agenda for Companies and Governments" in <u>On Competition</u> (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 Version: July 21, 2008, 4pm

Prosperity Performance Selected Middle- and Lower-Income Countries

PPP-adjusted GDP per Capita, 2007



Growth of Real GDP per Capita (PPP-adjusted), CAGR, 1998-2007

Mongolia's Competitive Position in 2008

 Mongolia has experienced fast GDP growth since 2000, reaping the benefits of earlier reforms and benevolent external conditions

However

- Growth is narrowly based on few sectors of the economy and driven by external factors, i.e. world prices of natural resource
- The macroeconomic challenges of fast growth are not under control with inflation at high and rising levels
- Political pressure to move focus from economic reforms towards the distribution of windfall gains from exports



Mongolia needs a new focus on upgrading competitiveness

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

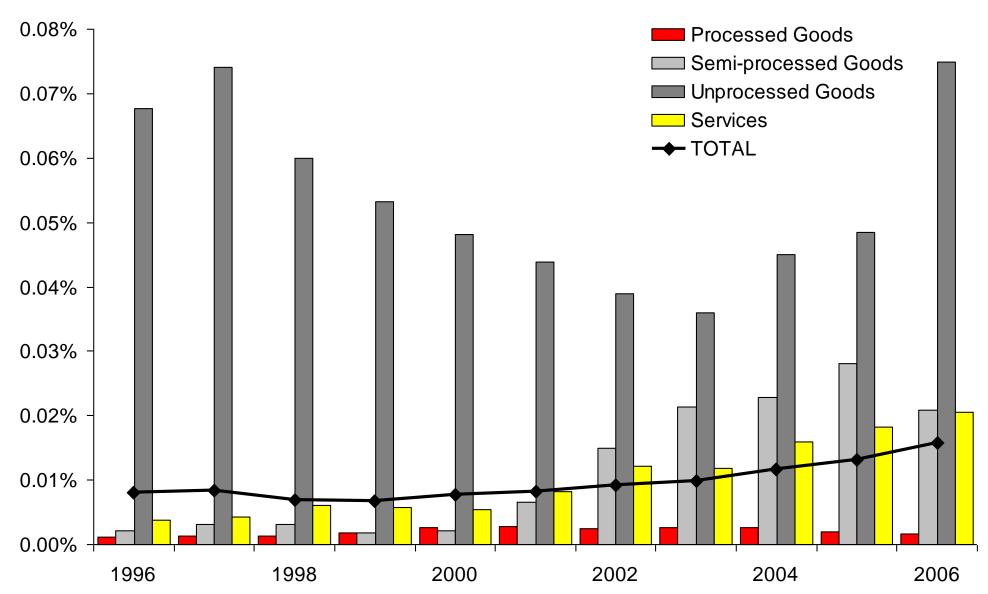


- Companies are the central actors in the economy
 - Prosperity can only be created by firms

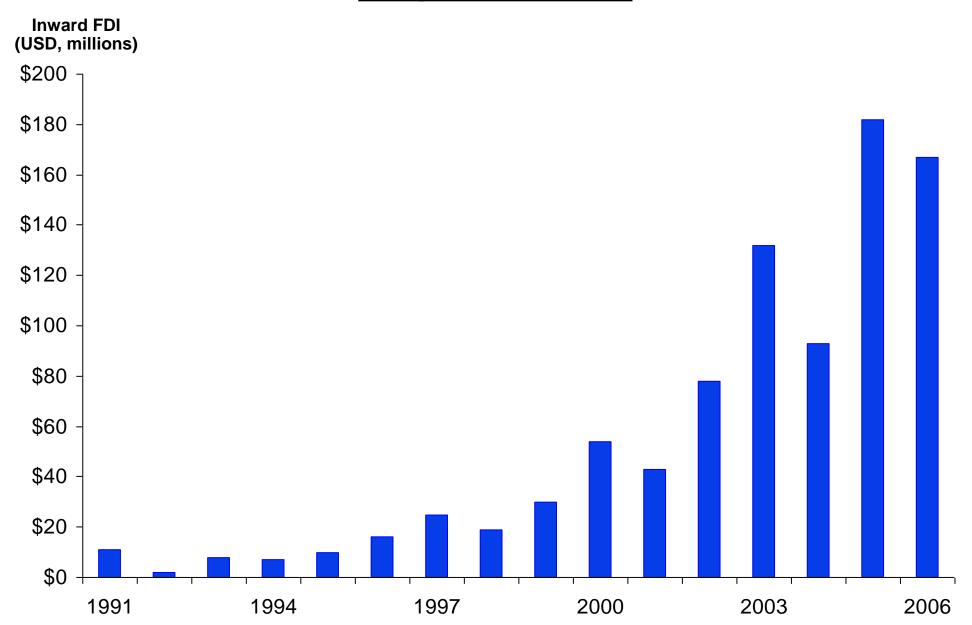
 Government's role is to create the enabling conditions for productivity and foster private sector development

Mongolia's Export Share Trends

World Export Market Share (current USD)



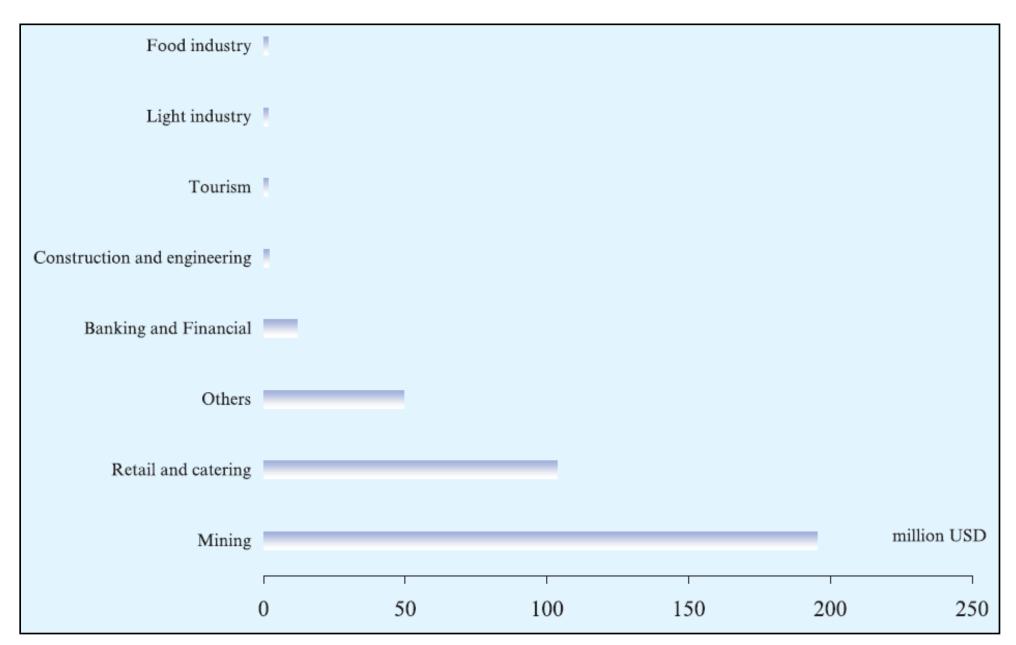
Inward Foreign Investment Flows Mongolia, 1991 - 2006



Note: Data not available for 1994.

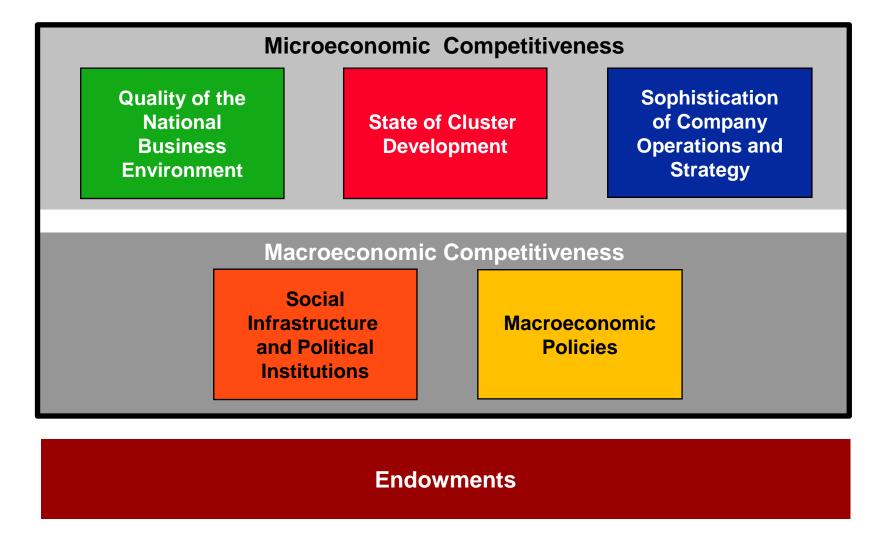
Source: UNCTAD (2007)
GCR South Africa 062007.ppt

Foreign Direct Investment By Industry Destination, 2006



Competitiveness Master - 2008-05-22.ppt

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

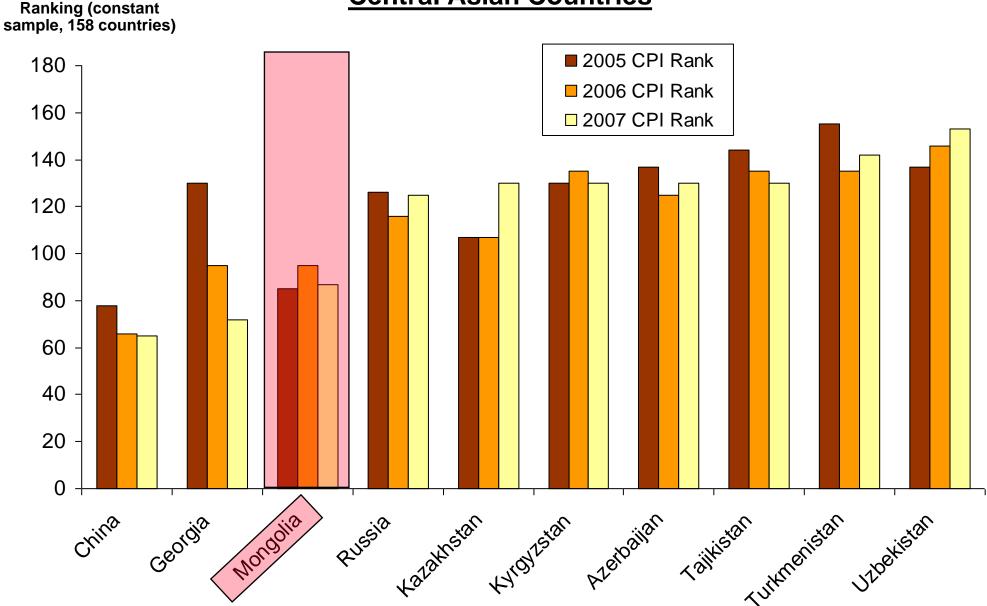
- Basic human capacity
 - Education
 - Health
- Safety and security
- Political institutions
- Rule of law

Macroeconomic Policies

Fiscal policy

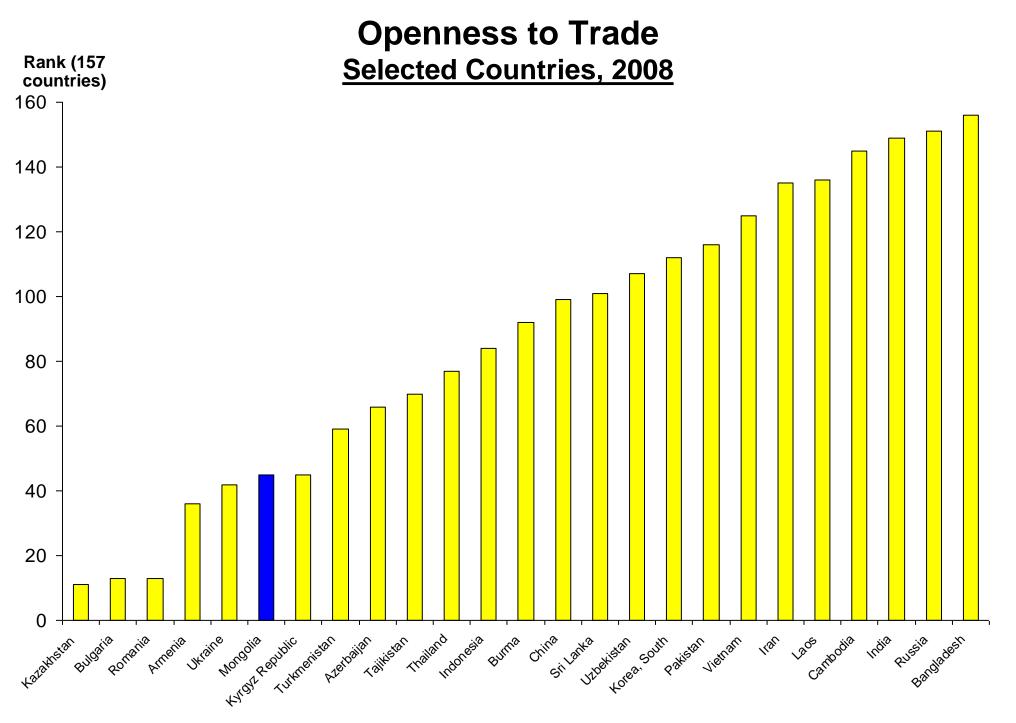
- Monetary policy
- Economic openness

Corruption Perception Index Central Asian Countries

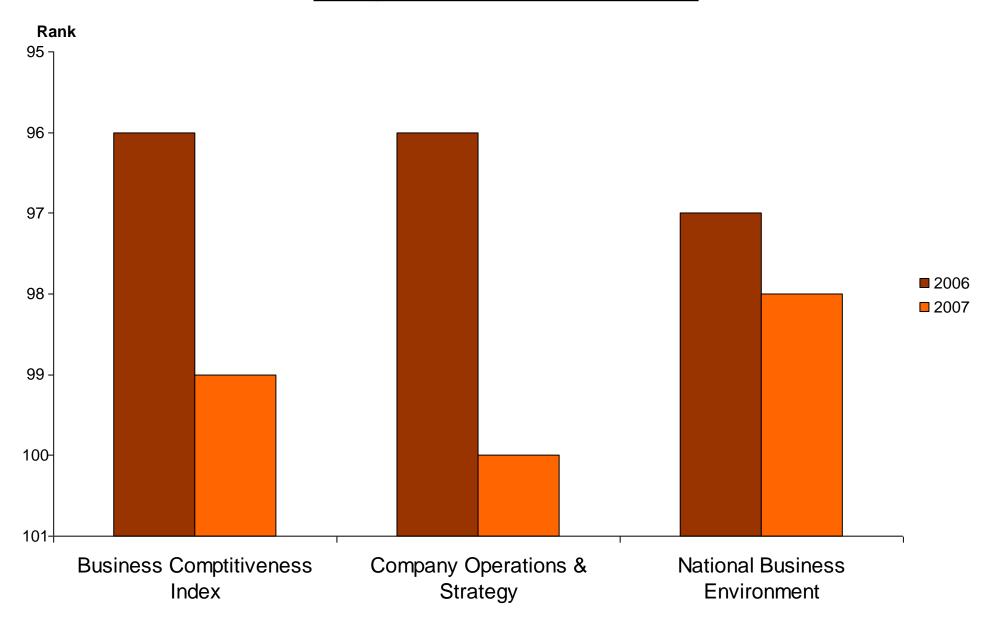


Note: Ranks only available starting in 2005 for all 5 countries

Source: Global Corruption Report, 2007

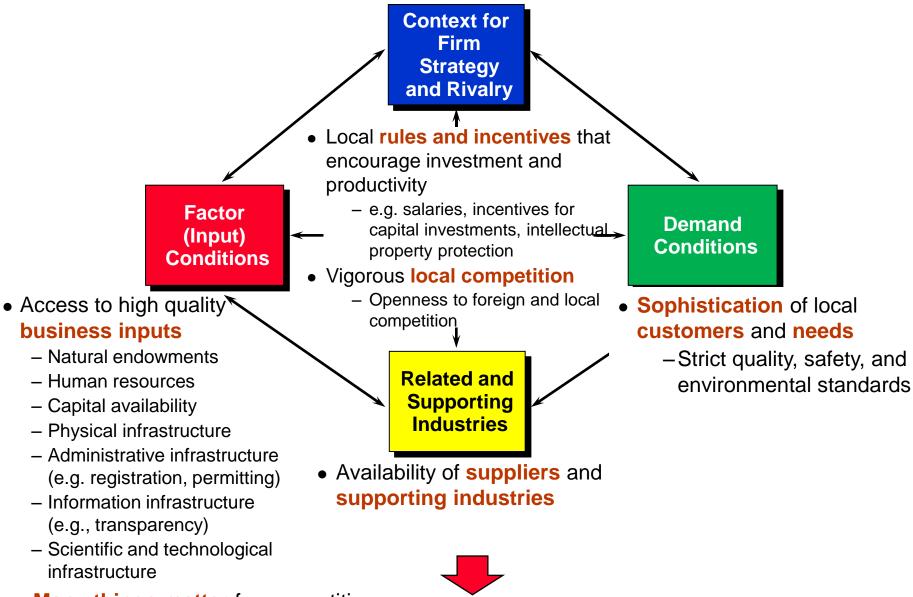


Microeconomic Competitiveness <u>Mongolia's Position over Time</u>



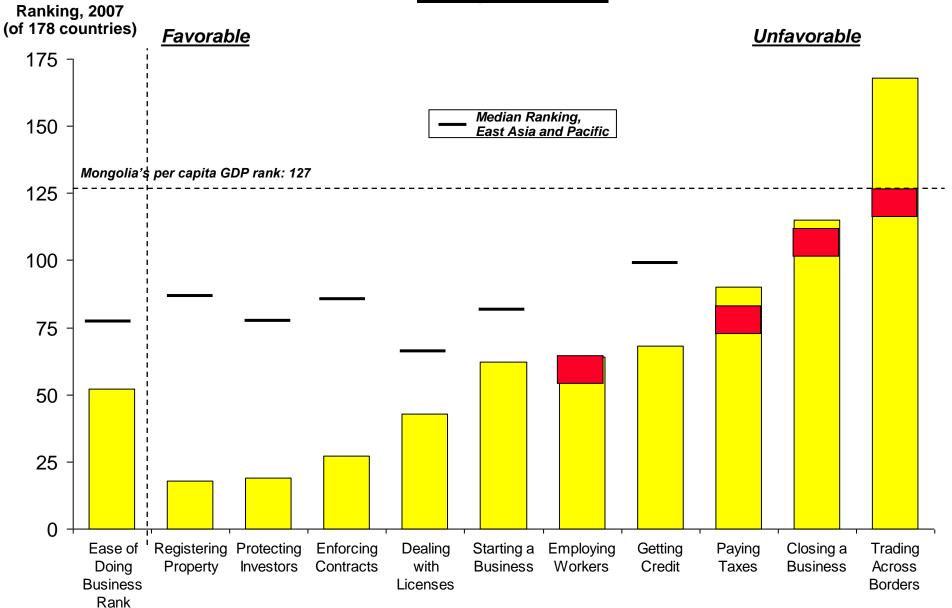
Note: Rank versus 111 countries; overall, Mongolia ranks 90th in 2007 PPP adjusted GDP per capita and 99th in Business Competitiveness. Source: Institute for Strategy and Competitiveness, Harvard University (2007), Mongolia GDP from the World Bank

Microeconomic Competitiveness: Quality of the Business Environment



- Many things matter for competitiveness
- Successful economic development is a process of successive upgrading, in which the business environment improves to enable increasingly sophisticated ways of competing

Ease of Doing Business Mongolia, 2007





Factor (Input) Conditions Mongolia's Relative Position 2007

Competitive Advantages Relative to GDP per Capita

The second secon	
Availability of scientists and engineers	46
Quality of math and science education	58
Railroad infrastructure development	64
Business costs of corruption	67
Cooperation in labor-employer relations	68
Freedom from corruption	72 🗸
University/industry research collaboration	74
Local equity market access	79√
Quality of scientific research institutions	81
Quality of public schools	88



Change up/down of more than 5/10 ranks since 2006

Competitive Disadvantages Relative to GDP per Capita	
Port infrastructure quality	110√
Ease of access to loans	110
Venture capital availability	110 🗸
Overall infrastructure quality	109
Air transport infrastructure quality	107
Quality of management schools	107
Efficiency of legal framework	99
Quality of electricity supply	97
Telephone/fax infrastructure quality	96
Reliability of police services	96
Judicial independence	96
Laws relating to ICT	95
Financial market sophistication	94

Note: Rank versus 111 countries; overall, Mongolia ranks 90th in 2007 PPP adjusted GDP per capita and 99th in Business Competitiveness. Source: Institute for Strategy and Competitiveness, Harvard University (2007), Mongolia GDP from the World Bank



Context for Strategy and Rivalry Mongolia's Relative Position 2007

Competitive Advantages Relative to GDP per Capita

Competitive Disadvantages Relative to GDP per Capita Property rights 108 Prevalence of trade barriers 108 Decentralization of corporate activity 107 Intellectual property protection 103 Favoritism in decisions of government officials



Change up/down of more than 5/10 ranks since 2006

Note: Rank versus 111 countries; overall, Mongolia ranks 90th in 2007 PPP adjusted GDP per capita and 99th in Business Competitiveness.

Source: Institute for Strategy and Competitiveness, Harvard University (2007), Mongolia GDP from the World Bank



Demand Conditions Mongolia's Relative Position 2007

Competitive Advantages Relative to GDP per Capita

Competitive Disadvantages
Relative to GDP per Capita

Stringency of environmental regulations 111

Presence of demanding regulatory 101

standards

Government procurement of advanced 90

technology products



Change up/down of more than 5/10 ranks since 2006

Note: Rank versus 111 countries; overall, Mongolia ranks 90th in 2007 PPP adjusted GDP per capita and 99th in Business Competitiveness.

Related and Supporting Industries Mongolia's Relative Position 2007

Competitive Advantages Relative to GDP per Capita

Local availability of specialized research and training services

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Change up/down of more than 5/10 ranks since 2006

Competitive Disadvantages Relative to GDP per Capita

Local supplier quantity 110

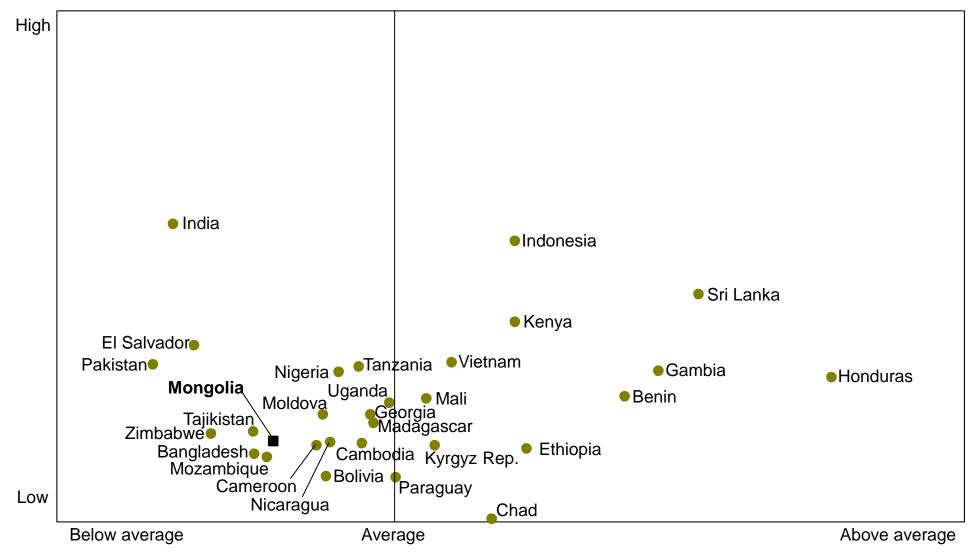
Local supplier quality 109

Local availability of process machinery 100-

Note: Rank versus 111 countries; overall, Mongolia ranks 90th in 2007 PPP adjusted GDP per capita and 99th in Business Competitiveness. Source: Institute for Strategy and Competitiveness, Harvard University (2007), Mongolia GDP from the World Bank

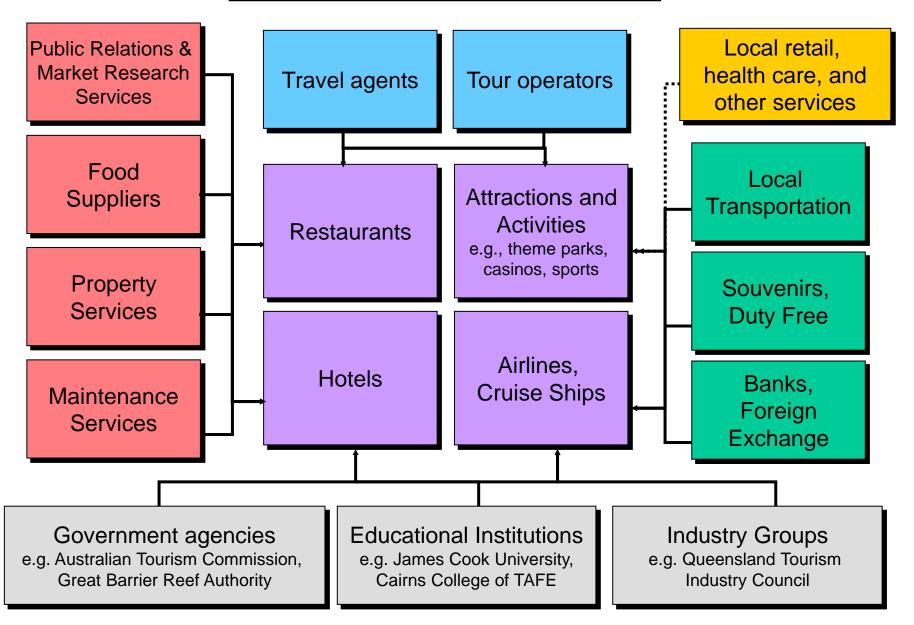
Rate of Competitiveness Improvement Low Income Countries, 2006 - 2007

BCI Value, 2007



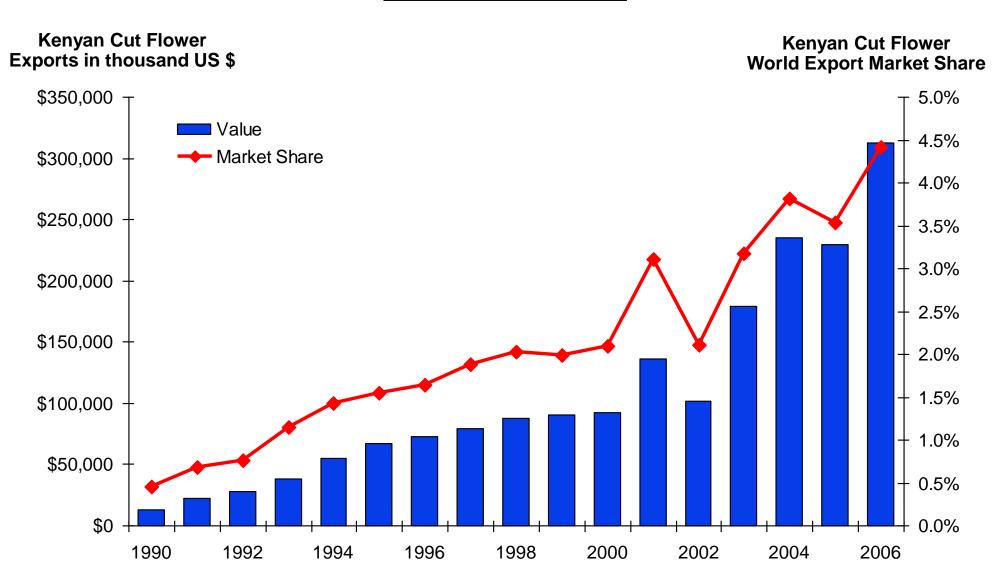
Dynamism Score, 2006 - 2007

Microeconomic Competitiveness: State of Cluster Development <u>Tourism Cluster in Cairns, Australia</u>



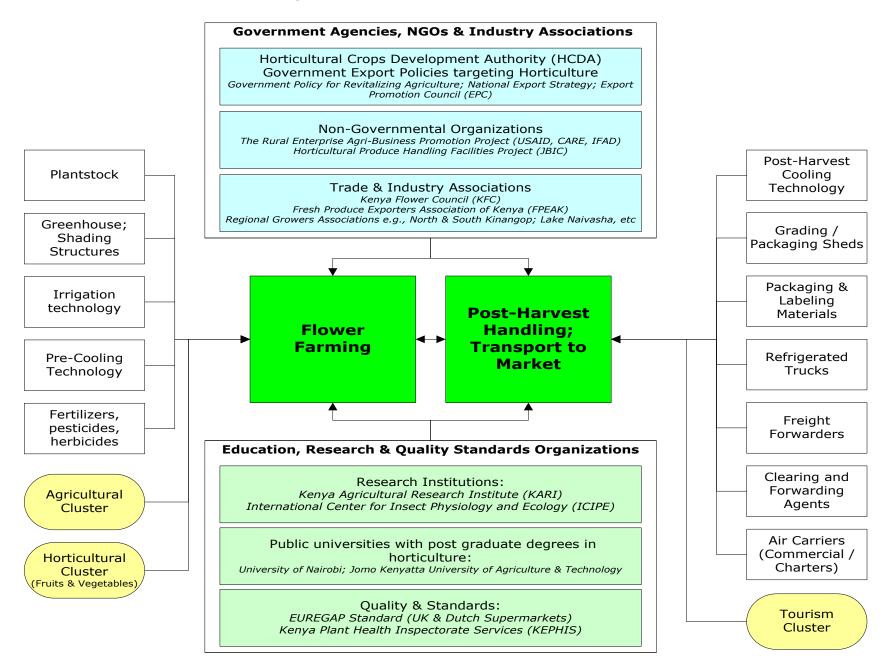
Sources: HBS student team research (2003) - Peter Tynan, Chai McConnell, Alexandra West, Jean Hayden

The Kenyan Cut Flower Cluster <u>Trade Performance</u>



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.

Kenya's Cut Flower Cluster



Sources: Student team research by Kusi Hornberger, Nick Ndiritu, Lalo Ponce-Brito, Melesse Tashu, and Tijan Watt,

Process of Cluster Development The Australian Wine Cluster"> The Australian Wine Cluster

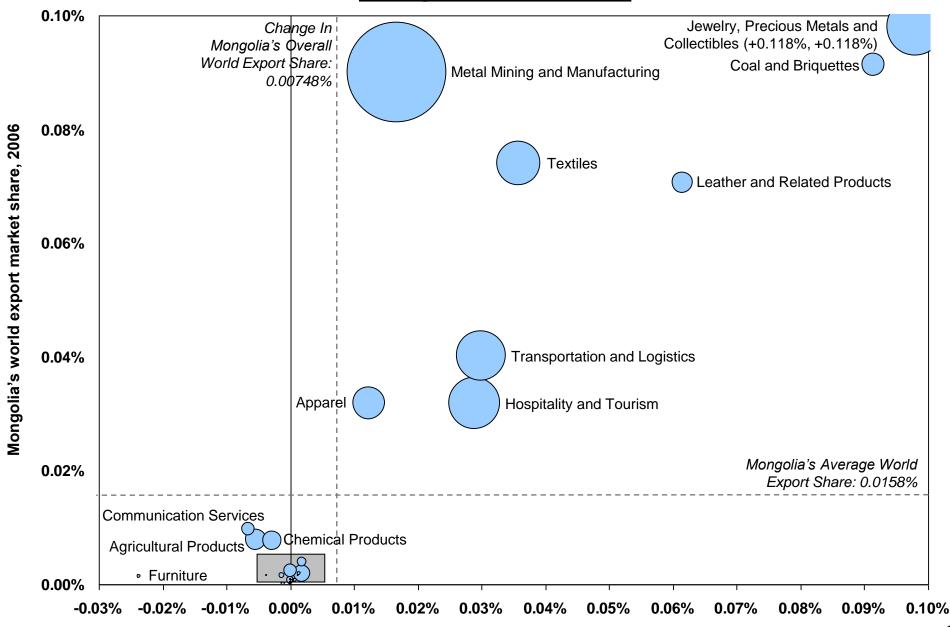
1930	1965	1980	1991 to Present
First oenology course at Roseworthy Agricultural College 1955 Australian Wine Research Institute founde	school at	Australian Wine and Brandy Corporation established 1990 Winemal Federation Australia establish	on of
6	6	\(\rightarrow\)	0000

1950s	1960s	1970s	1980s	1990s	2005
Import of European winery technology	Recruiting of experienced foreign investors, e.g. Wolf Bass	Continued inflow of foreign capital and management	Creation of large number of new wineries	Surge in expo international acquisitions	rts and

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

National Cluster Export Portfolio

Mongolia, 1997-2006

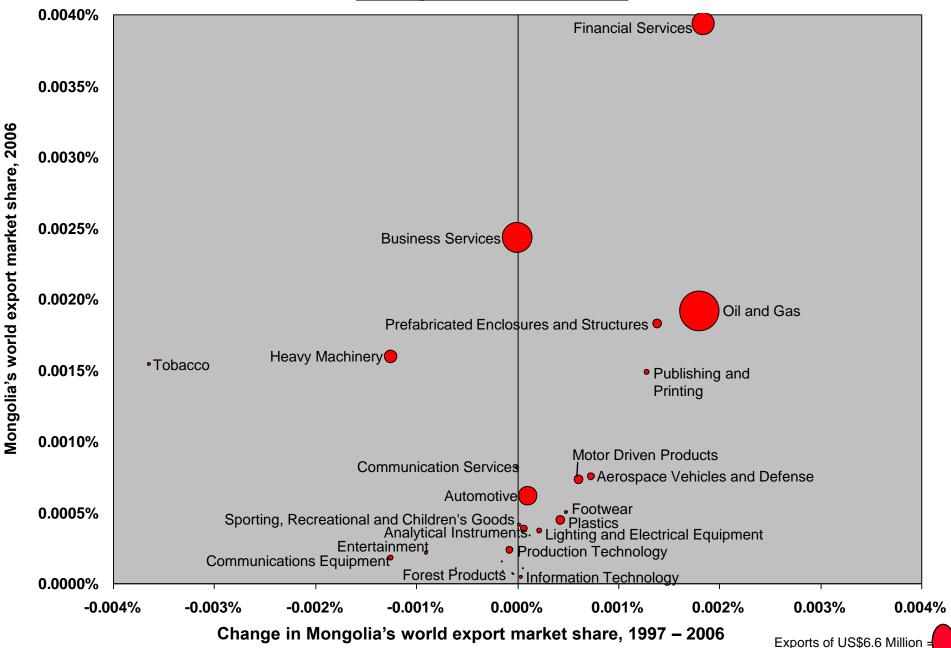


Change in Mongolia's world export market share, 1997 – 2006

Exports of US\$160 Million

National Cluster Export Portfolio

Mongolia, 1997-2006

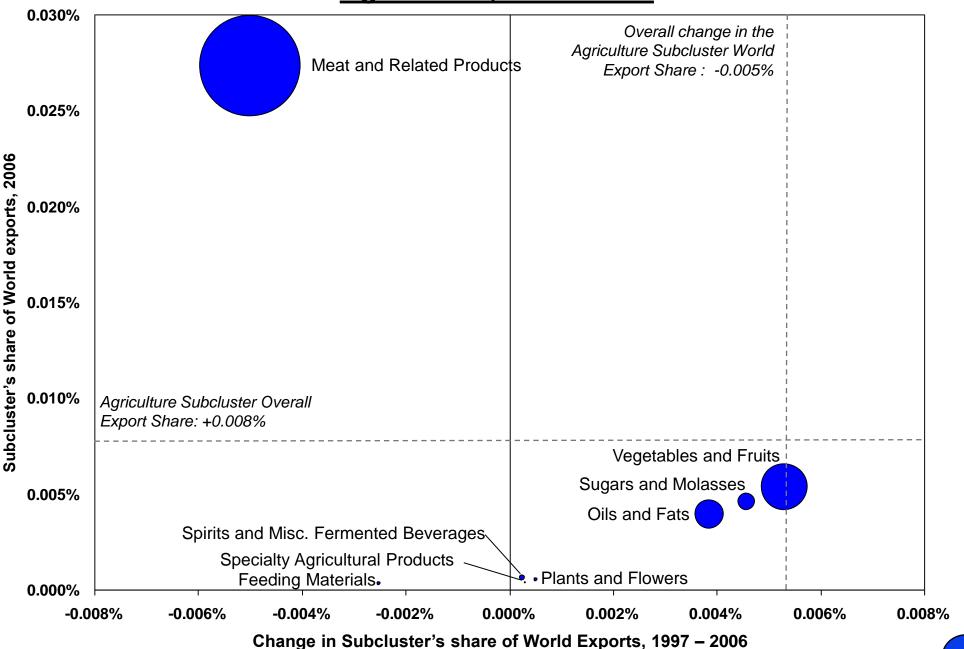


Source: Prof. Michael E. Porter, International Cluster Competitiveness Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director. Underlying data drawn from the UN Commodity Trade Statistics Database and the IMF BOP statistics.

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Mongolia Exports by Subcluster Agriculture, 1997 - 2006



Exports of US\$6.5 million =

Creating Competitiveness Linkages Across Clusters Fishing & **Textiles** Entertainment Fishing Prefabricated Hospitality **Products Enclosures** & Tourism Agricultural **Products Furniture Transportation** Distribution Building & Logistics Services Aerospace Fixtures. Construction Vehicles & **Equipment &** Materials Jewelry & Information Defense Services **Precious** Tech. Processed Heavy Metals Lightning & **Business** Food Construction Electrical Services Analytical Services Equipment Education & Instruments Forest Power Knowledge Medical **Financial Products** Generation Creation **Devices** Services Communications **Publishing** Equipment & Printing Biopharma-Heavy ceuticals Machinery **Production** Motor Driven Chemical **Technology Products Apparel Products** Tobacco Leather Oil & & Gas Metal **Automotive** Related Manufacturing **Plastics** Aerospace **Products Engines** Footwear **Sporting** & Recreation Goods Note: Clusters with overlapping borders or identical shading have at least 20% overlap (by number of industries) in both directions.

The Evolution of Regional Economies San Diego

Climate and Geography **Hospitality and Tourism**

Transportation and Logistics

Sporting and Leather Goods

U.S. Military Power Generation

Aerospace Vehicles and Defense

Communications Equipment

Analytical Instruments

Information Technology

Education and Knowledge Creation

Medical Devices

Bioscience Research Centers

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Biotech / Pharmaceuticals

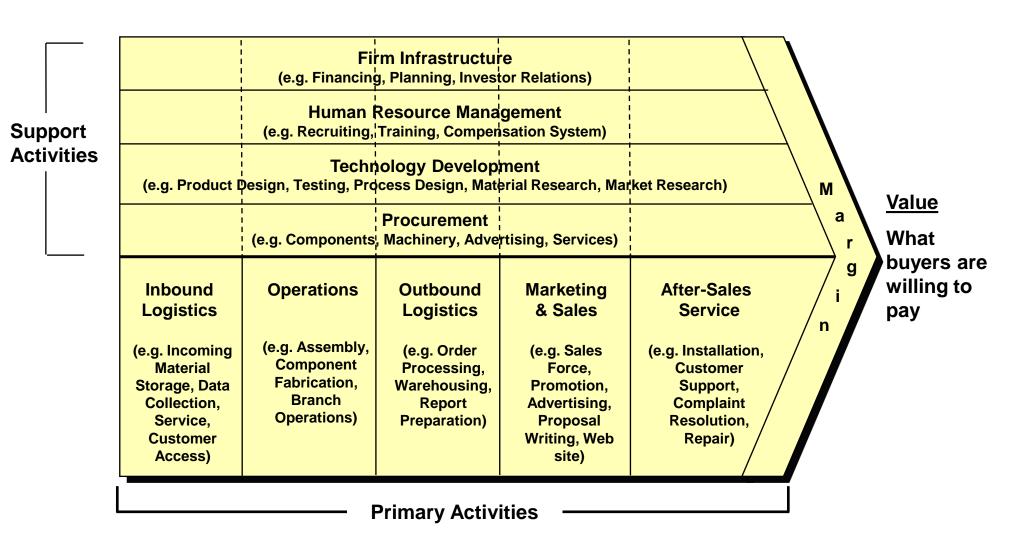
1910 1930

1950

1970

1990

Microeconomic Competitiveness: Company Sophistication



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

Company Sophistication Relative Position of Mongolian Companies, 2007

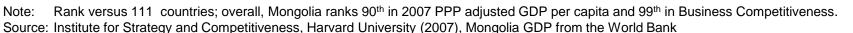
Competitive Advantages Relative to GDP per Capita

Nature of competitive advantage 75
Production process sophistication 80
Company spending on research and development
Extent of staff training 84

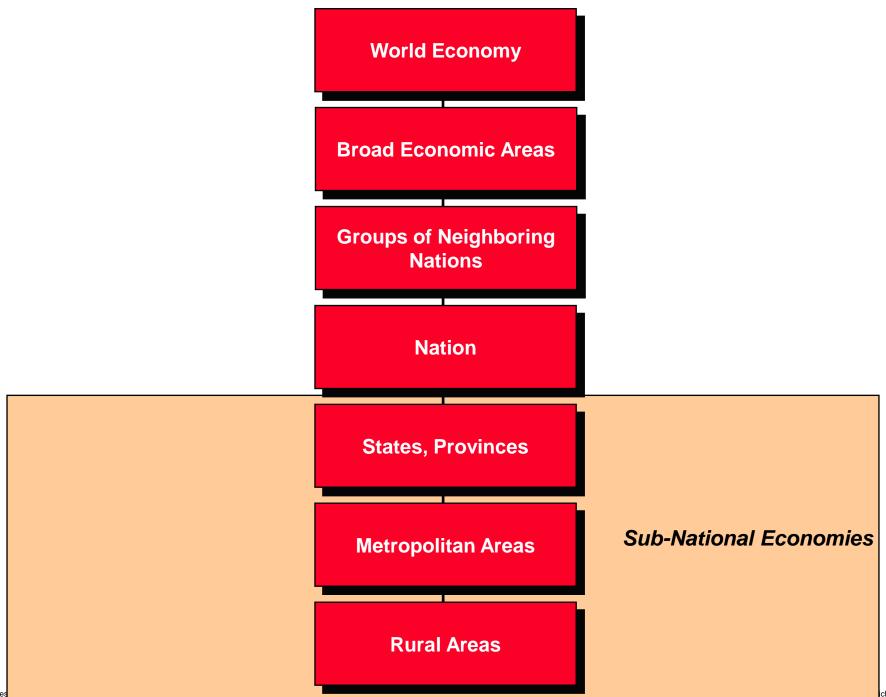


Competitive Disadvantages Relative to GDP per Capita

Value chain presence 111 Breadth of international markets 108 Reliance on professional management 106 Control of international distribution Extent of marketing Degree of customer orientation 100 Extent of incentive compensation 97 96 Willingness to delegate authority Extent of regional sales 94 Prevalence of foreign technology licensing

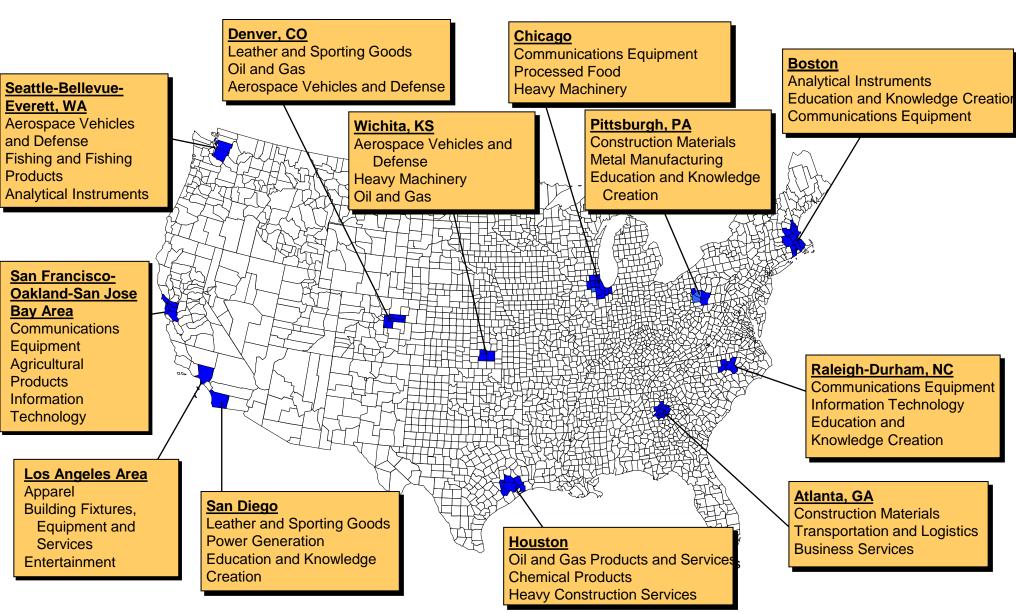


Geographic Influences on Competitiveness



chael E. Porte

Specialization of Regional Economies <u>Selected U.S. Geographic Areas</u>

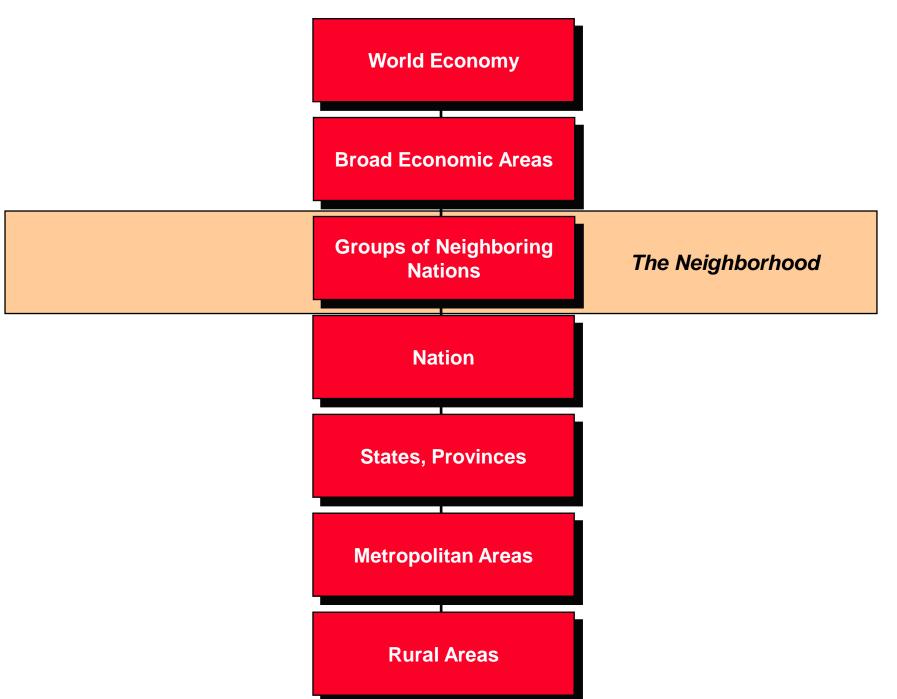


Note: Clusters listed are the three highest ranking clusters in terms of share of national employment. Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School, 11/2006.

Mongolia's Provinces (Aimags)



Geographic Influences on Competitiveness



The Neighborhood Northeast Asia



- Economic coordination among neighboring countries can significantly enhance competitiveness
- Integration offers greater opportunities than participation in broader economic forums (e.g., APEC)

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
- government procurement

Related and Supporting **Industries**

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

Macroeconomic Competitiveness

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

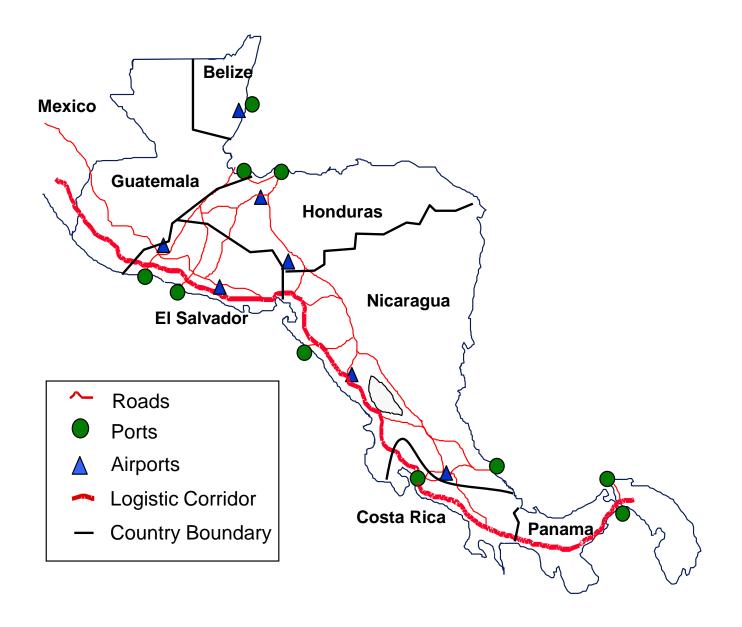
Regional Strategy & Governance

- 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

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 Opening within the region

Strategy for Cross-National Regions Central American Logistical Corridor



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,
 companies, teaching and
 research institutions, and private
 sector organizations

- 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

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

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-toweight
- Rwanda should develop air freightable goods and services exports to nullify its logistical disadvantages
 - eg, silk, flowers
- Rwanda in 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

Private Sector

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

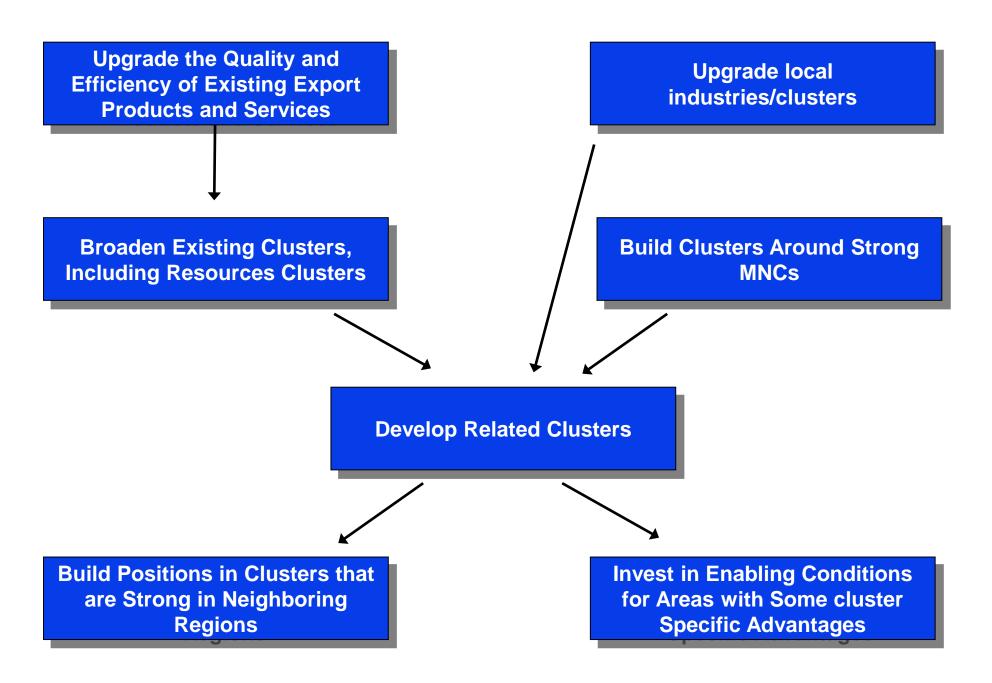
Cluster Development

- 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)

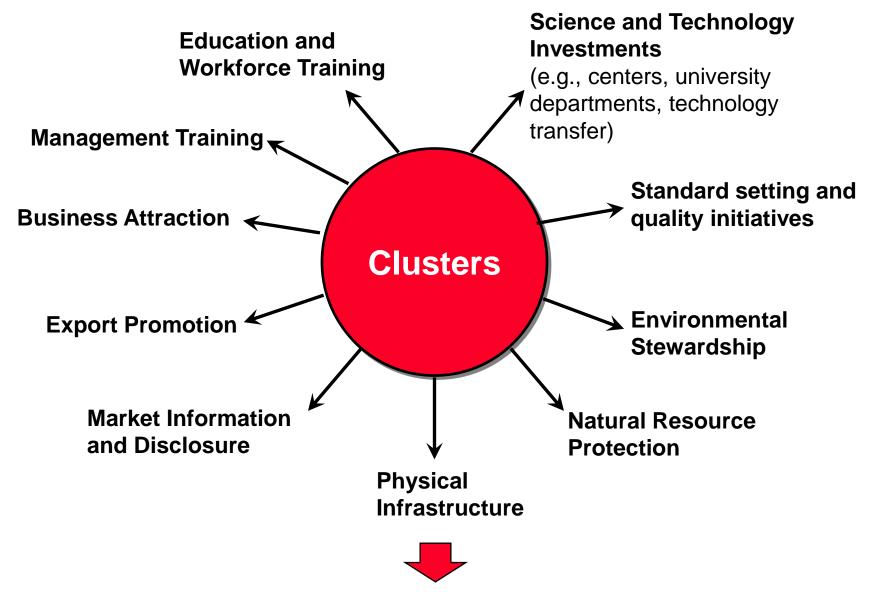
Neighborhood

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

Economic Diversification



Clusters and Economic Policy



 Clusters provide a framework for implementing public policy and organizing public-private collaboration to enhance competitiveness "Mongolia is at a critical juncture. Having completed its transition to a market-oriented economy, the challenge now is to attain global competitiveness. This requires a concerted and coordinated effort among all stakeholders, private and public, domestic and foreign."

David Dollar, Country Director for Mongolia, World Bank, 29. January 2008

Established Mongolian Export Products Leading Exports by Value, 2006

	Industry	Cluster	World Export Share	Change in Share (1997-2006)	-	ort Value (in nousands)
1	Copper ores and concentrates	Metal Mining and Manufacturing	2.16%	-1.62%		635,426
2	Gold, non-monetary, excluding ores	Jewelry, Precious Metals and Collectibles	0.53%	0.53%		270,105
3	Wool, other animal hair	Textiles	3.11%	2.15%		157,305
4	Zinc ores and concentrates	Metal Mining and Manufacturing	1.08%	1.08%	•	91,140
5	Ores and concentrates of molybdenum, etc.	Metal Mining and Manufacturing	0.51%	-0.48%		47,793
6	Coal, not agglomerated	Coal and Briquettes	0.09%	0.09%		45,076
7	Quartz, mica, felspar, fluorspar, etc.	Chemical Products	3.85%	-0.09%	\$	35,067
8	Sheep, lamb skin leather	Leather and Related Products	2.26%	2.26%	\$	24,578
9	Crude petroleum oils	Oil and Gas Products	0.00%	0.00%	\$	19,841
10	Women's trousers, breeches and shorts	Apparel	0.09%	0.07%	\$	18,183
11	Jerseys, pullovers, cardigans, knitted	Apparel	0.06%	0.02%	\$	17,617
12	Copper, copper anodes and alloys	Metal Mining and Manufacturing	0.03%	-0.01%	\$	16,202
13	T-shirts, other vests, knitted	Apparel	0.05%	0.05%	\$	13,241
14	Other meat, meat offal	Agricultural Products	0.03%	0.03%	\$	11,488
15	Iron Ore and Concentrates	Metal Mining and Manufacturing	0.04%	0.04%	\$	11,478
16	Men's or boys' shirts	Apparel	0.11%	0.05%	\$	10,390
17	Goat or kid skin leather	Leather and Related Products	1.34%	1.34%	\$	7,985
18	Women's suits, dresses, skirts, knitted	Apparel	0.06%	0.06%	\$	6,908
19	Fruit, nuts excluding oil nuts	Agricultural Products	0.01%	0.01%	\$	6,428
20	Other bovine, equine leather	Leather and Related Products	0.04%	0.04%	\$	6,285
21	Petroleum Oils	Oil and Gas Products	0.00%	0.00%	\$	5,317
22	Hides, skins (excluding furs), raw	Agricultural Products	0.09%	-0.33%	\$	5,219
23	Other animal materials	Agricultural Products	0.10%	-0.02%	\$	4,830
24	Men's trousers, breeches and shorts	Apparel	0.02%	0.02%	\$	4,748
25	Bovine meat	Agricultural Products	0.02%	-0.05%	\$	4,734

Top 25 Industries (by value) as % of Mongolia's total goods exports: 95.79%

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.

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Semi-Processed
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Established Mongolian Export Products Leading Exports by Share, 2006

	Industry	Cluster	World Export Share	Change in Share (1997- 2006)	Export Value (in \$thousands)
1	Quartz, mica, felspar, fluorspar, etc.	Chemical Products	3.85%	-0.09%	•
2	Wool, other animal hair	Textiles	3.11%	2.15%	
3	Sheep, lamb skin leather	Leather and Related Products	2.26%	2.26%	
4	Copper ores and concentrates	Metal Mining and Manufacturing	2.16%	-1.62%	•
5	Goat or kid skin leather	Leather and Related Products	1.34%	1.34%	•
6	Zinc ores and concentrates	Metal Mining and Manufacturing	1.08%	1.08%	•
7	Gold, non-monetary, excluding ores	Jewelry, Precious Metals and Collectibles	0.53%	0.53%	
	Ores of molybdenum, titanium, zirconium	Metal Mining and Manufacturing	0.51%	-0.48%	
	Balloons, and other non-powered aircraft	Aerospace Vehicles and Defense	0.24%	0.24%	·
	Bones, horns, ivory, coral and like products	Agricultural Products	0.12%	-0.65%	•
	Men's or boys' shirts	Apparel	0.11%	0.05%	
	Other animal materials	Agricultural Products	0.10%	-0.02%	
	Other non-ferrous ores and concentrates	Metal Mining and Manufacturing	0.10%	0.03%	
	Carpets and other floor coverings, knotted	Textiles	0.10%	0.10%	'
	Coal, not agglomerated	Coal and Briquettes	0.09%	0.09%	' '
	Hides, skins (excluding furs), raw	Agricultural Products	0.09%	-0.33%	
	Women's trousers, breeches and shorts	Apparel	0.09%	0.07%	,
	Lignite	Coal and Briquettes	0.08%	0.08%	•
	Women's blouses, and shirts, knitted	Apparel	0.08%	0.08%	
	Other plastic waste and scrap	Plastics	0.07%	0.07%	
	Men's or boys' shirts, knitted	Apparel	0.06%	0.05%	
	Women's suits, dresses, skirts, knitted	Apparel	0.06%	0.06%	
	Jerseys, pullovers, cardigans, knitted	Apparel	0.06%	0.02%	
	Men's or boys' jackets and blazers	Apparel	0.06%	0.05%	
25	Women's or girls' suits and ensembles	Apparel	0.05%	0.05%	\$ 1,557

Top 25 Industries (by share) as % of Mongolia's total goods exports: 90.38%

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.

Processed
Semi-Processed

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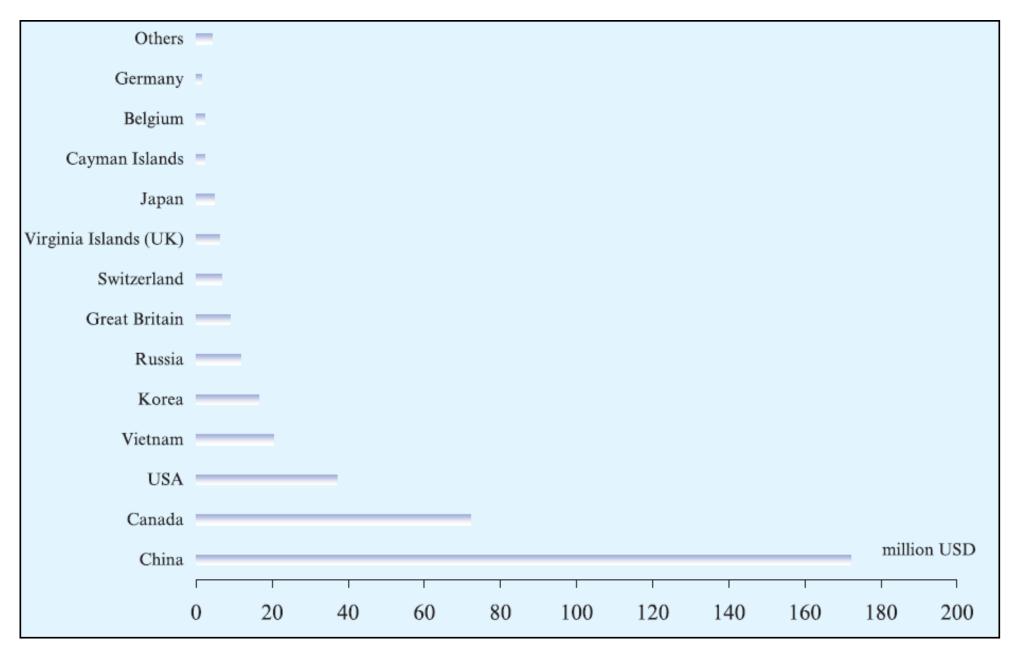
Upgrading Mongolian Export Portfolio Niche Positions Outside of Leading Clusters

Cluster	Cluster World Export Share	Subcluster	Industry	Industry Share of World Exports	Change in Share (1997- 2006)	Export Value (in \$thousands)
	0.008%	Meat and Related Products	Bones, horns, ivory, coral, etc.	0.12%	-0.65%	\$ 379
		Meat and Related Products	Other animal materials	0.10%	-0.02%	\$ 4,830
Agricultural Products		Meat and Related Products	Hides, skins (excluding furs), raw	0.09%	-0.33%	\$ 5,219
		Meat and Related Products	Other meat, meat offal	0.03%	0.03%	\$ 11,488
		Meat and Related Products	Bovine meat	0.02%	-0.05%	\$ 4,734
Chemical Products	0.008%	Misc. Crude Materials	Quartz, mica, felspar, fluorspar, etc.	3.85%	-0.09%	\$ 35,067
	0.002%	Oil and Gas Machinery	Other boring machinery, not self-propelled	0.03%	0.03%	\$ 641
Oil and Gas Products		Oil and Gas Machinery	Rock drills, earth borers	0.02%	0.02%	\$ 404
Prefabricated Enclosures and Structures	0.002%	Prefabricated Buildings	Prefabricated buildings	0.02%	0.01%	\$ 1,101
Heavy Machinery	0.002%	Mining Machinery	Rock/tunneling machinery, not self-propelled	0.02%	0.02%	\$ 85
Furniture	0.001%	Wood Furnishings	Wood for domestic use, not furniture	0.05%	0.05%	\$ 1,483
Aerospace Vehicles and Defense	0.001%	Aircraft	Balloons, and other non-powered aircraft	0.24%	0.24%	\$ 63
Motor Driven	0.001%	Appliances	Sewing machines and parts	0.03%	0.03%	\$ 1,230
Automotive	0.001%	Motor Vehicles Assembly	Other special purpose vehicles	0.03%	0.03%	\$ 1,195
Plastics	0.000%	Plastic Waste	Other plastic waste and scrap	0.07%	0.07%	\$ 1,448

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.

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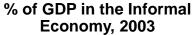
Foreign Direct Investment By Source Country, 2006

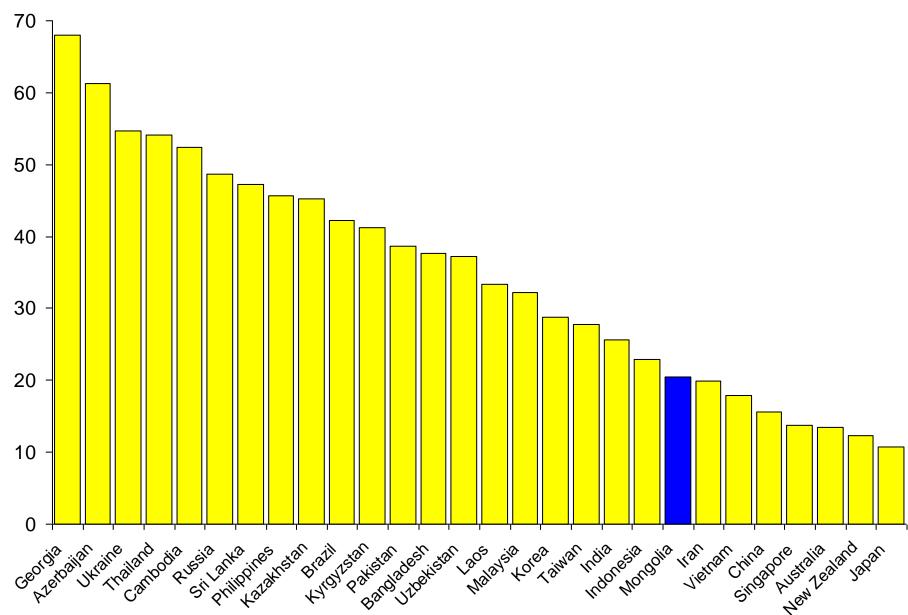


Source: Annual Report, 2006), Mongolia Central Bank (2008)

Competitiveness Master - 2008-05-22.ppt

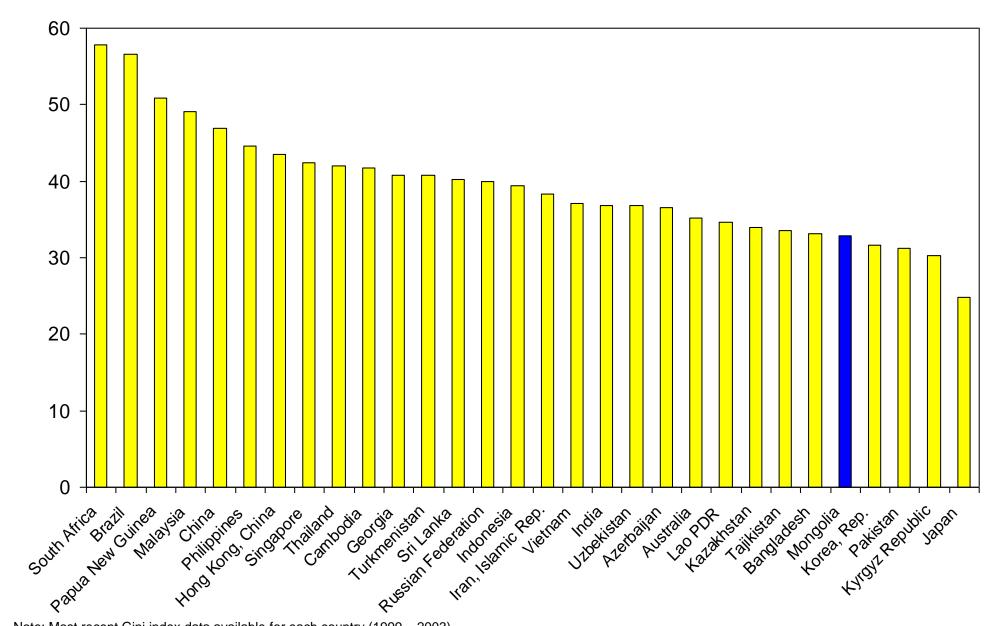
Size of the Informal Economy Selected Countries





Income Inequality Selected Countries

Gini Index



Note: Most recent Gini index data available for each country (1999 – 2003).

Source: World Bank, World Development Indicators, 2007.

Tests of a National Economic Strategy

- Has the country articulated a distinctive position?
 - That will create a positive identity for the country?
 - That will inspire citizens?
- Does the strategy build on strengths?
 - Are the strengths realistic versus neighbors and other peer countries?
- Does the strategy fit with trends in the region and the world economy?
- Is the strategy realistic given the country's weaknesses. Can those weaknesses inconsistent with the strategy be neutralized?
- Are social and political reforms integrated with economic reforms pursued simultaneously?
- Is there the political will and the political consensus to implement the strategy?

Tests of a National Economic Strategy - cont'd

- Do the policy priorities fit the strategy?
 - The choice of policies to address
 - The sequence in which policies are implemented?
- Has the strategy been communicated clearly to the stakeholders?
- Is the private sector engaged?
- Is government organized around the strategy?
- Is there an overall coordinating structure for economic development?
- Is the quality of governmental agencies and other institutions sufficient for effective implementation?
- Are there mechanisms to measure progress and review / modify the strategy as prosperity improves or conditions change?