Competitiveness: Creating a Mongolian Economic Strategy

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Institute for Strategy and Competitiveness
Harvard Business School

July, 2008
Prosperity Performance
Selected Middle- and Lower-Income Countries

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

Source: EIU (2008), authors calculations. Mongolia data for 1998-2006, from World Development Indicators

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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)

- Processed Goods
- Semi-processed Goods
- Unprocessed Goods
- Services
- TOTAL

Source: WTO (2008)
Inward Foreign Investment Flows
Mongolia, 1991 - 2006

Note: Data not available for 1994.
Source: UNCTAD (2007)
Foreign Direct Investment
By Industry Destination, 2006

• 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
Openness to Trade
Selected Countries, 2008

Rank (157 countries)

Source: Index of Economic Freedom (2008), Heritage Foundation
Microeconomic Competitiveness
Mongolia’s Position over Time

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

Context for Firm Strategy and Rivalry

- Local rules and incentives that encourage investment and productivity
  - e.g. salaries, incentives for capital investments, intellectual property protection
- Vigorous local competition
  - Openness to foreign and local competition

Factor (Input) Conditions

- Access to high quality business inputs
  - Natural endowments
  - Human resources
  - Capital availability
  - Physical infrastructure
  - Administrative infrastructure (e.g. registration, permitting)
  - Information infrastructure (e.g., transparency)
  - Scientific and technological infrastructure

Demand Conditions

- Sophistication of local customers and needs
  - Strict quality, safety, and environmental standards

Related and Supporting Industries

- Availability of suppliers and supporting industries

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

Median Ranking, East Asia and Pacific

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

Mongolia's per capita GDP rank: 127

### Competitive Advantages Relative to GDP per Capita

<table>
<thead>
<tr>
<th>Factor</th>
<th>2007 Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of scientists and engineers</td>
<td>46</td>
</tr>
<tr>
<td>Quality of math and science education</td>
<td>58</td>
</tr>
<tr>
<td>Railroad infrastructure development</td>
<td>64</td>
</tr>
<tr>
<td>Business costs of corruption</td>
<td>67</td>
</tr>
<tr>
<td>Cooperation in labor-employer relations</td>
<td>68</td>
</tr>
<tr>
<td>Freedom from corruption</td>
<td>72</td>
</tr>
<tr>
<td>University/industry research collaboration</td>
<td>74</td>
</tr>
<tr>
<td>Local equity market access</td>
<td>79</td>
</tr>
<tr>
<td>Quality of scientific research institutions</td>
<td>81</td>
</tr>
<tr>
<td>Quality of public schools</td>
<td>88</td>
</tr>
</tbody>
</table>

### Competitive Disadvantages Relative to GDP per Capita

<table>
<thead>
<tr>
<th>Factor</th>
<th>2007 Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port infrastructure quality</td>
<td>110</td>
</tr>
<tr>
<td>Ease of access to loans</td>
<td>110</td>
</tr>
<tr>
<td>Venture capital availability</td>
<td>110</td>
</tr>
<tr>
<td>Overall infrastructure quality</td>
<td>109</td>
</tr>
<tr>
<td>Air transport infrastructure quality</td>
<td>107</td>
</tr>
<tr>
<td>Quality of management schools</td>
<td>107</td>
</tr>
<tr>
<td>Efficiency of legal framework</td>
<td>99</td>
</tr>
<tr>
<td>Quality of electricity supply</td>
<td>97</td>
</tr>
<tr>
<td>Telephone/fax infrastructure quality</td>
<td>96</td>
</tr>
<tr>
<td>Reliability of police services</td>
<td>96</td>
</tr>
<tr>
<td>Judicial independence</td>
<td>96</td>
</tr>
<tr>
<td>Laws relating to ICT</td>
<td>95</td>
</tr>
<tr>
<td>Financial market sophistication</td>
<td>94</td>
</tr>
</tbody>
</table>

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 101

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

<table>
<thead>
<tr>
<th>Competitive Disadvantage</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stringency of environmental regulations</td>
<td>111</td>
</tr>
<tr>
<td>Presence of demanding regulatory standards</td>
<td>101</td>
</tr>
<tr>
<td>Government procurement of advanced technology products</td>
<td>90</td>
</tr>
</tbody>
</table>

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 78 ▼

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

Microeconomic Competitiveness: State of Cluster Development
Tourism Cluster in Cairns, Australia

Public Relations & Market Research Services
Food Suppliers
Property Services
Maintenance Services

Travel agents
Tour operators

Restaurants
Attractions and Activities
e.g., theme parks, casinos, sports
Hotels
Airlines, Cruise Ships

Local retail, health care, and other services
Local Transportation
Souvenirs, Duty Free
Banks, Foreign Exchange

Government agencies
e.g. Australian Tourism Commission, Great Barrier Reef Authority
Educational Institutions
e.g. James Cook University, Cairns College of TAFE
Industry Groups
e.g. Queensland Tourism Industry Council

Sources: HBS student team research (2003) - Peter Tynan, Chai McConnell, Alexandra West, Jean Hayden
The Kenyan Cut Flower Cluster
Trade Performance

Kenyan Cut Flower Exports in thousand US $

$0
$50,000
$100,000
$150,000
$200,000
$250,000
$300,000
$350,000


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.
Kenya’s Cut Flower Cluster

Government Agencies, NGOs & Industry Associations

Horticultural Crops Development Authority (HCDA)
Government Export Policies targeting Horticulture
Government Policy for Revitalizing Agriculture; National Export Strategy; Export Promotion Council (EPC)

Non-Governmental Organizations
The Rural Enterprise Agri-Business Promotion Project (USAID, CARE, IFAD)
Horticultural Produce Handling Facilities Project (IBIC)

Trade & Industry Associations
Kenya Flower Council (KFC)
Fresh Produce Exporters Association of Kenya (FPEAK)
Regional Growers Associations e.g., North & South Kinangop; Lake Naivasha, etc

Plantstock

Education, Research & Quality Standards Organizations

Research Institutions:
Kenya Agricultural Research Institute (KARI)
International Center for Insect Physiology and Ecology (ICIPE)

Public universities with post graduate degrees in horticulture:
University of Nairobi; Jomo Kenyatta University of Agriculture & Technology

Quality & Standards:
EUREGAP Standard (UK & Dutch Supermarkets)
Kenya Plant Health Inspectorate Services (KEPHIS)

Post-Harvest Cooling Technology

Grading / Packaging Sheds

Packaging & Labeling Materials

Refrigerated Trucks

Freight Forwarders

Clearing and Forwarding Agents

Air Carriers (Commercial / Charters)

Tourism Cluster

Sources: Student team research by Kusi Hornberger, Nick Ndiritu, Lalo Ponce-Brito, Melesse Tashu, and Tijan Watt, Microeconomics of Competitiveness Course, 2007

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Process of Cluster Development
The Australian Wine Cluster

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 Present
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

2005

National Cluster Export Portfolio
Mongolia, 1997-2006

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

Mongolia’s world export market share, 2006

Change in Mongolia’s Overall World Export Share: 0.00748%

Mongolia’s Average World Export Share: 0.0158%

Exports of US$160 Million =

Richard Bryden, Project Director. Underlying data drawn from the UN Commodity Trade Statistics Database and the IMF BOP statistics.
National Cluster Export Portfolio
Mongolia, 1997-2006

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

Exports of US$6.6 Million =

Mongolia Exports by Subcluster
Agriculture, 1997 - 2006

Overall change in the Agriculture Subcluster World Export Share: -0.005%

Agriculture Subcluster Overall Export Share: +0.008%

Change in Subcluster’s share of World Exports, 1997 – 2006

Exports of US$6.5 million =

Creating Competitiveness
Linkages Across Clusters

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
- U.S. Military
- Bioscience Research Centers


- Hospitality and Tourism
- Transportation and Logistics
- Power Generation
- Communications Equipment
- Information Technology
- Education and Knowledge Creation
- Medical Devices
- Biotech / Pharmaceuticals
- Aerospace Vehicles and Defense
- Analytical Instruments
- Military and Defense
- Climate and Geography
- Sports and Leather Goods
- Information Technology

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• Competitiveness requires that local companies upgrade the quality of the value chain.
Company Sophistication
Relative Position of Mongolian Companies, 2007

<table>
<thead>
<tr>
<th>Competitive Advantages Relative to GDP per Capita</th>
<th>Competitive Disadvantages Relative to GDP per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature of competitive advantage</td>
<td>Value chain presence</td>
</tr>
<tr>
<td>Production process sophistication</td>
<td>Breadth of international markets</td>
</tr>
<tr>
<td>Company spending on research and development</td>
<td>Reliance on professional management</td>
</tr>
<tr>
<td>Extent of staff training</td>
<td>Control of international distribution</td>
</tr>
<tr>
<td></td>
<td>Extent of marketing</td>
</tr>
<tr>
<td></td>
<td>Degree of customer orientation</td>
</tr>
<tr>
<td></td>
<td>Extent of incentive compensation</td>
</tr>
<tr>
<td></td>
<td>Willingness to delegate authority</td>
</tr>
<tr>
<td></td>
<td>Extent of regional sales</td>
</tr>
<tr>
<td></td>
<td>Prevalence of foreign technology licensing</td>
</tr>
</tbody>
</table>

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
Geographic Influences on Competitiveness

- World Economy
- Broad Economic Areas
- Groups of Neighboring Nations
- Nation
- States, Provinces
- Metropolitan Areas
- Rural Areas

Sub-National Economies
Specialization of Regional Economies
Selected U.S. Geographic Areas

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

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

Los Angeles Area
Apparel
Building Fixtures, Equipment and Services
Entertainment

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

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

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

Los Angeles Area
Apparel
Building Fixtures, Equipment and Services
Entertainment

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

Note: Clusters listed are the three highest ranking clusters in terms of share of national employment.
Mongolia’s Provinces (Aimags)
Geographic Influences on Competitiveness

- World Economy
- Broad Economic Areas
- Groups of Neighboring Nations
- The Neighborhood
- Nation
- States, Provinces
- Metropolitan Areas
- Rural Areas
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

<table>
<thead>
<tr>
<th>Factor (Input) Conditions</th>
<th>Context for Strategy and Rivalry</th>
<th>Demand Conditions</th>
<th>Related and Supporting Industries</th>
<th>Macroeconomic Competitiveness</th>
<th>Regional Strategy &amp; Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving regional transportation infrastructure</td>
<td>Eliminating trade and investment barriers within the region</td>
<td>Harmonizing environmental standards</td>
<td>Facilitating cross-border cluster upgrading, e.g.</td>
<td>Coordinating programs to improve public safety</td>
<td>Creating a regional strategy and marketing program</td>
</tr>
<tr>
<td>Creating an efficient energy network</td>
<td>Simplifying and harmonizing cross-border regulations and paperwork</td>
<td>Harmonizing product safety standards</td>
<td>– Tourism</td>
<td>Coordinating macro-economic policies</td>
<td>Sharing best practices in government operations</td>
</tr>
<tr>
<td>Enhancing regional communications and connectivity</td>
<td>Coordinating anti-monopoly and fair competition policies</td>
<td>Establishing reciprocal consumer protection laws</td>
<td>– Agribusiness</td>
<td>– Transport &amp; Logistics</td>
<td>Creating regional institutions</td>
</tr>
<tr>
<td>Linking financial markets</td>
<td>Opening government procurement within the region</td>
<td>– Business services</td>
<td>– Business services</td>
<td>– Business services</td>
<td>– Dispute resolution mechanisms</td>
</tr>
<tr>
<td>Opening the movement of students for higher education</td>
<td></td>
<td></td>
<td></td>
<td>– Regional development bank</td>
<td></td>
</tr>
<tr>
<td>Harmonizing administrative requirements for businesses</td>
<td></td>
<td></td>
<td></td>
<td>– Developing a regional position with international organizations</td>
<td></td>
</tr>
</tbody>
</table>
Strategy for Cross-National Regions
Central American Logistical Corridor

- Roads
- Ports
- Airports
- Logistic Corridor
- Country Boundary

Mexico
Belize
Guatemala
Honduras
El Salvador
Nicaragua
Costa Rica
Panama
Country Boundary
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-to-weight
• 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

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
Economic Diversification

- Upgrade the Quality and Efficiency of Existing Export Products and Services
- Upgrade local industries/clusters
- Broaden Existing Clusters, Including Resources Clusters
- Build Clusters Around Strong MNCs
- Develop Related Clusters
- Build Positions in Clusters that are Strong in Neighboring Regions
- Invest in Enabling Conditions for Areas with Some cluster Specific Advantages
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
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Copper ores and concentrates</td>
<td>Metal Mining and Manufacturing</td>
<td>2.16%</td>
<td>-1.62%</td>
<td>$635,426</td>
</tr>
<tr>
<td>2 Gold, non-monetary, excluding ores</td>
<td>Jewelry, Precious Metals and Collectibles</td>
<td>0.53%</td>
<td>0.53%</td>
<td>$270,105</td>
</tr>
<tr>
<td>3 Wool, other animal hair</td>
<td>Textiles</td>
<td>3.11%</td>
<td>2.15%</td>
<td>$157,305</td>
</tr>
<tr>
<td>4 Zinc ores and concentrates</td>
<td>Metal Mining and Manufacturing</td>
<td>1.08%</td>
<td>1.08%</td>
<td>$91,140</td>
</tr>
<tr>
<td>5 Ores and concentrates of molybdenum, etc.</td>
<td>Metal Mining and Manufacturing</td>
<td>0.51%</td>
<td>-0.48%</td>
<td>$47,793</td>
</tr>
<tr>
<td>6 Coal, not agglomerated</td>
<td>Coal and Briquettes</td>
<td>0.09%</td>
<td>0.09%</td>
<td>$45,076</td>
</tr>
<tr>
<td>7 Quartz, mica, felspar, fluor spar, etc.</td>
<td>Chemical Products</td>
<td>3.85%</td>
<td>-0.09%</td>
<td>$35,067</td>
</tr>
<tr>
<td>8 Sheep, sheepskin leather</td>
<td>Leather and Related Products</td>
<td>2.26%</td>
<td>2.26%</td>
<td>$24,578</td>
</tr>
<tr>
<td>9 Crude petroleum oils</td>
<td>Oil and Gas Products</td>
<td>0.00%</td>
<td>0.00%</td>
<td>$19,841</td>
</tr>
<tr>
<td>10 Women’s trousers, breeches and shorts</td>
<td>Apparel</td>
<td>0.09%</td>
<td>0.07%</td>
<td>$18,183</td>
</tr>
<tr>
<td>11 Jerseys, pullovers, cardigans, knitted</td>
<td>Apparel</td>
<td>0.06%</td>
<td>0.02%</td>
<td>$17,617</td>
</tr>
<tr>
<td>12 Copper, copper anodes and alloys</td>
<td>Metal Mining and Manufacturing</td>
<td>0.03%</td>
<td>-0.01%</td>
<td>$16,202</td>
</tr>
<tr>
<td>13 T-shirts, other vests, knitted</td>
<td>Apparel</td>
<td>0.05%</td>
<td>0.05%</td>
<td>$13,241</td>
</tr>
<tr>
<td>14 Other meat, meat offal</td>
<td>Agricultural Products</td>
<td>0.03%</td>
<td>0.03%</td>
<td>$11,488</td>
</tr>
<tr>
<td>15 Iron Ore and Concentrates</td>
<td>Metal Mining and Manufacturing</td>
<td>0.04%</td>
<td>0.04%</td>
<td>$11,478</td>
</tr>
<tr>
<td>16 Men’s or boys’ shirts</td>
<td>Apparel</td>
<td>0.11%</td>
<td>0.05%</td>
<td>$10,390</td>
</tr>
<tr>
<td>17 Goat or kid skin leather</td>
<td>Leather and Related Products</td>
<td>1.34%</td>
<td>1.34%</td>
<td>$7,985</td>
</tr>
<tr>
<td>18 Women’s suits, dresses, skirts, knitted</td>
<td>Apparel</td>
<td>0.06%</td>
<td>0.06%</td>
<td>$6,908</td>
</tr>
<tr>
<td>19 Fruit, nuts excluding oil nuts</td>
<td>Agricultural Products</td>
<td>0.01%</td>
<td>0.01%</td>
<td>$6,428</td>
</tr>
<tr>
<td>20 Other bovine, equine leather</td>
<td>Leather and Related Products</td>
<td>0.04%</td>
<td>0.04%</td>
<td>$6,285</td>
</tr>
<tr>
<td>21 Petroleum Oils</td>
<td>Oil and Gas Products</td>
<td>0.00%</td>
<td>0.00%</td>
<td>$5,317</td>
</tr>
<tr>
<td>22 Hides, skins (excluding furs), raw</td>
<td>Agricultural Products</td>
<td>0.09%</td>
<td>-0.33%</td>
<td>$5,219</td>
</tr>
<tr>
<td>23 Other animal materials</td>
<td>Agricultural Products</td>
<td>0.10%</td>
<td>-0.02%</td>
<td>$4,830</td>
</tr>
<tr>
<td>24 Men’s trousers, breeches and shorts</td>
<td>Apparel</td>
<td>0.02%</td>
<td>0.02%</td>
<td>$4,748</td>
</tr>
<tr>
<td>25 Bovine meat</td>
<td>Agricultural Products</td>
<td>0.02%</td>
<td>-0.05%</td>
<td>$4,734</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1 Quartz, mica, felspar, fluorspar, etc.</td>
<td>Chemical Products</td>
<td>3.85%</td>
<td>-0.09%</td>
<td>$35,067</td>
</tr>
<tr>
<td>2 Wool, other animal hair</td>
<td>Textiles</td>
<td>3.11%</td>
<td>2.15%</td>
<td>$157,305</td>
</tr>
<tr>
<td>3 Sheep, lamb skin leather</td>
<td>Leather and Related Products</td>
<td>2.26%</td>
<td>2.26%</td>
<td>$24,578</td>
</tr>
<tr>
<td>4 Copper ores and concentrates</td>
<td>Metal Mining and Manufacturing</td>
<td>2.16%</td>
<td>-1.62%</td>
<td>$635,426</td>
</tr>
<tr>
<td>5 Goat or kid skin leather</td>
<td>Leather and Related Products</td>
<td>1.34%</td>
<td>1.34%</td>
<td>$7,985</td>
</tr>
<tr>
<td>6 Zinc ores and concentrates</td>
<td>Metal Mining and Manufacturing</td>
<td>1.08%</td>
<td>1.08%</td>
<td>$91,140</td>
</tr>
<tr>
<td>7 Gold, non-monetary, excluding ores</td>
<td>Jewelry, Precious Metals and Collectibles</td>
<td>0.53%</td>
<td>0.53%</td>
<td>$270,105</td>
</tr>
<tr>
<td>8 Ores of molybdenum, titanium, zirconium</td>
<td>Metal Mining and Manufacturing</td>
<td>0.51%</td>
<td>-0.48%</td>
<td>$47,793</td>
</tr>
<tr>
<td>9 Balloons, and other non-powered aircraft</td>
<td>Aerospace Vehicles and Defense</td>
<td>0.24%</td>
<td>0.24%</td>
<td>$63</td>
</tr>
<tr>
<td>10 Bones, horns, ivory, coral and like products</td>
<td>Agricultural Products</td>
<td>0.12%</td>
<td>-0.65%</td>
<td>$379</td>
</tr>
<tr>
<td>11 Men’s or boys’ shirts</td>
<td>Apparel</td>
<td>0.11%</td>
<td>0.05%</td>
<td>$10,390</td>
</tr>
<tr>
<td>12 Other animal materials</td>
<td>Agricultural Products</td>
<td>0.10%</td>
<td>-0.02%</td>
<td>$4,830</td>
</tr>
<tr>
<td>13 Other non-ferrous ores and concentrates</td>
<td>Metal Mining and Manufacturing</td>
<td>0.10%</td>
<td>0.03%</td>
<td>$1,249</td>
</tr>
<tr>
<td>14 Carpets and other floor coverings, knotted</td>
<td>Textiles</td>
<td>0.10%</td>
<td>0.10%</td>
<td>$1,467</td>
</tr>
<tr>
<td>15 Coal, not agglomerated</td>
<td>Coal and Briquettes</td>
<td>0.09%</td>
<td>0.09%</td>
<td>$45,076</td>
</tr>
<tr>
<td>16 Hides, skins (excluding furs), raw</td>
<td>Agricultural Products</td>
<td>0.09%</td>
<td>-0.33%</td>
<td>$5,219</td>
</tr>
<tr>
<td>17 Women’s trousers, breeches and shorts</td>
<td>Apparel</td>
<td>0.09%</td>
<td>0.07%</td>
<td>$18,183</td>
</tr>
<tr>
<td>18 Lignite</td>
<td>Coal and Briquettes</td>
<td>0.08%</td>
<td>0.08%</td>
<td>$124</td>
</tr>
<tr>
<td>19 Women’s blouses, and shirts, knitted</td>
<td>Apparel</td>
<td>0.08%</td>
<td>0.08%</td>
<td>$4,548</td>
</tr>
<tr>
<td>20 Other plastic waste and scrap</td>
<td>Plastics</td>
<td>0.07%</td>
<td>0.07%</td>
<td>$1,448</td>
</tr>
<tr>
<td>21 Men’s or boys’ shirts, knitted</td>
<td>Apparel</td>
<td>0.06%</td>
<td>0.05%</td>
<td>$3,109</td>
</tr>
<tr>
<td>22 Women’s suits, dresses, skirts, knitted</td>
<td>Apparel</td>
<td>0.06%</td>
<td>0.06%</td>
<td>$6,908</td>
</tr>
<tr>
<td>23 Jerseys, pullovers, cardigans, knitted</td>
<td>Apparel</td>
<td>0.06%</td>
<td>0.02%</td>
<td>$17,617</td>
</tr>
<tr>
<td>24 Men’s or boys’ jackets and blazers</td>
<td>Apparel</td>
<td>0.06%</td>
<td>0.05%</td>
<td>$2,309</td>
</tr>
<tr>
<td>25 Women’s or girls’ suits and ensembles</td>
<td>Apparel</td>
<td>0.05%</td>
<td>0.05%</td>
<td>$1,557</td>
</tr>
</tbody>
</table>

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

## Upgrading Mongolian Export Portfolio
### Niche Positions Outside of Leading Clusters

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

Foreign Direct Investment
By Source Country, 2006

Size of the Informal Economy
Selected Countries

% of GDP in the Informal Economy, 2003

Georgia
Azerbaijan
Ukraine
Thailand
Cambodia
Russia
Sri Lanka
Philippines
Kazakhstan
Brazil
Kyrgyzstan
Pakistan
Bangladesh
Uzbekistan
Laos
Malaysia
Korea
Taiwan
India
Indonesia
Mongolia
Iran
Vietnam
China
Singapore
Australia
New Zealand
Japan

Source: World Bank Doing Business and Friedrich Schneider
Income Inequality
Selected Countries

Gini Index

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