Raising Indonesia’s Competitiveness

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This presentation draws on ideas from Professor Porter’s books and articles, in particular, “Building the Microeconomic Foundations of Prosperity,” in The Global Competitiveness Report 2006-07 (World Economic Forum, 2006); “Clusters and the New Competitive Agenda for Companies and Governments,” in On Competition (Harvard Business School Press, 1998); Clusters of Innovation Initiative (www.compete.org), a joint effort of the Council on Competitiveness, Monitor Group, and ongoing research. 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 the author.

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Prosperity Performance
Selected Countries

PPP-adjusted GDP per Capita, 2005

Growth of Real GDP per Capita (PPP-adjusted), CAGR, 2000-2005

Source: EIU (2006), authors’ calculations
Trends in the Global Economy

- Globalization of markets
- Globalization of value chains
- Globalization of knowledge
- Innovation and skill an increasing share of value added
- Services an increasing share of value added

- Competitiveness depends on productivity
- The bar for competitiveness is rising
- Competitiveness in the global economy is a positive-sum game
Unemployment Performance
Selected Developing Countries

Unemployment Rate, 2005

Improving

Philippines
Pakistan
Australia
New Zealand
Vietnam

Worsening

India
China
Sri Lanka
Hong Kong
Myanmar
Malaysia
Taiwan
Singapore
Bangladesh

Change of Unemployment Rate in Percentage Points, 2000-2005

Source: EIU (2006)
Indonesia Export Share Trends

Note: Services data not available for 2004 and 2005.
Source: WTO (2005)
Foreign Investment Stocks and Flows
Selected Countries

Stock of FDI as a % of GDP, Average 2001-2004

FDI Inflows as a % of Gross Fixed Capital Formation, Average 2001-2004

Source: UNCTAD (2005)
Indonesian Economy in 2006

- Stable growth since the 1998 Asian crisis
- Prosperity growth is positive, but only average among Asian peers
- Unemployment remains a crucial problem
- World export market share is on a downward trend
- Foreign direct investment inflows are disappointing

- Economic outcomes are acceptable, but Indonesia is underperforming its potential
- The government’s reforms have so far had limited visible impact on the performance of the economy
Indonesia’s Challenging Economic Legacy

• Normal challenges of an emerging economy

• Natural catastrophes (Tsunami, SARS)

• Large population and huge geographic spread

• Strong regional loyalties

• Significant natural resources that generate revenue without the need for productivity

• Maturing political process and lack of well-established government, business, and social institutions

• Legacy of corruption and inefficient, poorly governed state-owned companies

• Terrorism
What is Competitiveness?

- Competitiveness is determined by the **productivity** (value per unit of input) with which a nation or a region uses its human, capital, and natural resources. Productivity sets a nation’s or region’s standard of living (wages, returns on capital, returns on natural resources)
  - Productivity depends both on the **value** of products and services (e.g. uniqueness, quality) as well as the **efficiency** with which they are produced.
  - It is not **what** industries a nation or region competes in that matters for prosperity, but **how** firms compete in those industries
  - Productivity in a nation or region is a reflection of what both domestic and foreign firms **choose to do in that location.** The location of ownership is secondary for national prosperity.
  - The productivity of **“local”** industries is fundamental to competitiveness, not just that of traded industries
  - Devaluation and revaluation do **not** make a country more or less “competitive”

- Nations and regions compete in offering the **most productive environment** for business
- The public and private sectors should play **different but interrelated roles** in creating a productive economy
Determinants of Competitiveness

- A sound macroeconomic, political, legal, and social context creates the potential for competitiveness, **but is not sufficient**
- Only **firms** can create wealth, not government
Integration of Macro- and Microeconomic Reforms

Stability and confidence support investment and upgrading

Macro reform alone leads to short term capital inflows and growth spurts that ultimately are not sustainable

Micro reform is impeded by macroeconomic volatility that reduces company investment

Create the opportunity for productivity

Required to achieve productivity

Productivity growth allows economic growth and rising incomes without inflation, making macroeconomic stability easier to achieve

Macroeconomic reform

Microeconomic reform

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Indonesian Context
Work in Process

• Macroeconomic policy continues to be solid

• The political system is improving but the ability to implement and enforce policies and ensure a stable policy environment for business remains a challenge

• The legal system still suffers from low credibility in terms of swift, predictable, and fair application of the law

• Social conditions remain challenging in many parts of the country, especially in the rural areas
Governance
Selected Countries, 2004

Categories sorted by Indonesia’s rank
- Government effectiveness
- Regulatory quality
- Voice & Accountability
- Rule of Law
- Corruption
- Political Stability

Sorted by average rank across all six categories

Upgrading the Business Environment

Context for Firm Strategy and Rivalry
- Local rules, regulations, and norms that encourage investment and productivity
- Open and vigorous local competition

Factor (Input) Conditions
- Presence of high quality, business inputs
  - Human resources
  - Capital resources
  - Physical infrastructure
  - Scientific and technological infrastructure
  - Administrative systems (e.g., permitting and approvals)
  - Wide availability of information
  - Natural resources

Demand Conditions
- Sophisticated and demanding local customer(s)
- Local needs that anticipate those elsewhere

Related and Supporting Industries
- Access to capable, locally based suppliers and firms in related fields
- Presence of clusters instead of isolated industries

Successful economic development is the process of enhancing the business environment to support and encourage increasingly sophisticated ways of competing.
Determinants of Competitiveness
Cluster Development, Cairns (Australia) Tourism

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

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Determinants of Competitiveness
Cluster Development, Houston Oil and Gas

Upstream

Oil & Natural Gas Exploration & Development

Oil & Natural Gas Completion & Production

Oilfield Services/Engineering & Contracting Firms

Equipment Suppliers
(e.g. Oil Field Chemicals, Drilling Rigs, Drill Tools)

Specialized Technology Services
(e.g. Drilling Consultants, Reservoir Services, Laboratory Analysis)

Subcontractors
(e.g. Surveying, Mud Logging, Maintenance Services)

Downstream

Business Services
(e.g. MIS Services, Technology Licenses, Risk Management)

Specialized Institutions
(e.g. Academic Institutions, Training Centers, Industry Associations)

Oil & Natural Gas Transportation

Oil Trading

Oil Refining

Oil Distribution

Oil Wholesale Marketing

Gas Gathering

Gas Processing

Gas Trading

Gas Transmission

Gas Distribution

Gas Marketing

Oil Refining

Oil Wholesale Marketing

Gas Distribution

Gas Marketing

Oil Retail Marketing

Gas Retail Marketing

Oil & Natural Gas Exploration & Development

Oil & Natural Gas Completion & Production

Oil & Natural Gas Transportation

Oil & Natural Gas Refining

Oil & Natural Gas Distribution

Oil & Natural Gas Retail Marketing

Gas & Oil Exploration & Production

Gas & Oil Transportation

Gas & Oil Refining

Gas & Oil Distribution

Gas & Oil Wholesale Marketing

Gas & Oil Marketing
Clusters and Competitiveness

Clusters Increase Productivity / Efficiency

• Efficient **access** to specialized inputs, services, employees, information, institutions, and “public goods” (e.g. training programs)
• Ease of **coordination** and transactions across firms
• Rapid **diffusion** of best practices
• Ongoing, visible **performance comparisons** and strong incentives to improve vs. local rivals

Clusters Stimulate and Enable Innovations

• Enhanced ability to **perceive innovation opportunities**
• Presence of multiple suppliers and institutions to assist in **knowledge creation**
• Ease of **experimentation** given locally available resources

Clusters Facilitate Commercialization

• Opportunities for **new companies** and **new lines of established business** are more apparent
• **Commercializing** new products and starting new companies is easier because of available skills, suppliers, etc.

Clusters reflect the fundamental influence of **linkages and spill-overs** across firms and associated institutions in competition
Cluster Specialization
Leading Footwear Clusters

**Portugal**
- Production
- Focus on short-production runs in the medium price range

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

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

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

**Romania**
- Production subsidiaries of Italian companies
- Focus on lower to medium price range

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

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

Source: Research by HBS student teams in 2002 – Van Thi Huynh, Evan Lee, Kevin Newman, Nils Ole Oermann
Institutions for Collaboration
Selected Massachusetts Organizations, Life Sciences

**Life Sciences Industry Associations**
- Massachusetts Biotechnology Council
- Massachusetts Medical Device Industry Council
- Massachusetts Hospital Association

**General Industry Associations**
- Associated Industries of Massachusetts
- Greater Boston Chamber of Commerce
- High Tech Council of Massachusetts

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

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

**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)
Specialization of Regional Economies
Select 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

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

- **Chicago**
  - Communications Equipment
  - Processed Food
  - Heavy Machinery

- **Boston**
  - Analytical Instruments
  - Education and Knowledge Creation

- **Wichita, KS**
  - Aerospace Vehicles and Defense
  - Heavy Machinery

- **Pittsburgh, PA**
  - Construction Materials
  - Metal Manufacturing
  - Education and Knowledge Creation

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

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

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

- **Atlanta, GA**
  - Construction Materials
  - Transportation and Logistics
  - Business Services

- **Houston**
  - Oil and Gas Products and Services
  - Chemical Products
  - Heavy Construction Services

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

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

World Economy

Broad Economic Areas

Groups of Neighboring Nations

Nations

States, Provinces

Cities
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 institutions for collaboration

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

- **Every** community and cluster can take steps to enhance competitiveness
The Indonesian Business Environment

Overview

Context for Firm Strategy and Rivalry

- Inflexibilities in labor markets
- Still significant impediments to fair and open competition
  - State-owned enterprises
  - Trade barriers
  - Corruption
- Competition law improved but implementation still problematic

Factor (Input) Conditions

- Financial markets are developing positively
- Bottlenecks in the infrastructure remain a key problem
- Skill weaknesses and shortages in the workforce both at high and medium skill level
- Government bureaucracy and cumbersome regulations

Demand Conditions

- Low level of cluster development
- Existing or emerging clusters in tourism, oil & gas, and financial services

Related and Supporting Industries

- Existing or emerging clusters in tourism, oil & gas, and financial services

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**Factor Conditions**

**Indonesia Weaknesses 2006**

### Competitive Disadvantages Relative to GDP per Capita

<table>
<thead>
<tr>
<th>Factor Conditions</th>
<th>2006 Rank</th>
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<tbody>
<tr>
<td>Port infrastructure quality</td>
<td>98 ↓</td>
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<tr>
<td>Reliability of police services</td>
<td>98</td>
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<tr>
<td>Overall infrastructure quality</td>
<td>95 ↓</td>
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<tr>
<td>Judicial independence</td>
<td>90</td>
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<tr>
<td>Quality of electricity supply</td>
<td>87 ↓</td>
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<tr>
<td>Financial market sophistication</td>
<td>83 ↓</td>
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<tr>
<td>Telephone/fax infrastructure quality</td>
<td>81</td>
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<tr>
<td>University/industry research collaboration</td>
<td>78 ↓</td>
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<tr>
<td>Efficiency of legal framework</td>
<td>75 ↑</td>
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<td>Air transport infrastructure quality</td>
<td>70</td>
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<tr>
<td>Railroad infrastructure development</td>
<td>63 ↓</td>
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<tr>
<td>Quality of public schools</td>
<td>42 ↑</td>
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Country Ranking, Arrows indicate a change of 5 or more ranks since 2001.

Note: Rank versus 121 countries; overall, Indonesia ranks 35th in Business Competitiveness and 83rd in 2005 PPP adjusted GDP per capita.

Communications Infrastructure
Selected Countries

## Business Regulations
### Indonesia’s Relative Position 2006

**Competitive Advantages Relative to GDP per Capita**

<table>
<thead>
<tr>
<th>Country Ranking</th>
<th>Protecting Investors</th>
<th>Trading Across Borders</th>
<th>Getting Credit</th>
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**Competitive Disadvantages Relative to GDP per Capita**

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<tr>
<th>Country Ranking</th>
<th>Starting a Business</th>
<th>Enforcing Contracts</th>
<th>Employing Workers</th>
<th>Closing a Business</th>
<th>OVERALL</th>
<th>Paying Taxes</th>
<th>Dealing with Licenses</th>
<th>Registering Property</th>
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International Patenting Output
Selected Countries

Factor (Input) Conditions

Annual U.S. patents per 1 million population, 2004

Source: USPTO, 2005
Indonesia
Cluster Export Portfolio, 1997-2005

Change in Indonesia's overall world export share: -0.01%

Indonesia's average world export share: 0.88%

Exports of $5 billion =

Indonesia
Cluster Export Portfolio, 1997-2005

Change in Indonesia’s world export market share, 1997 – 2005

Change In Indonesia’s Overall World Export Share: -0.01%

Exports of $5 billion = [Diagram showing various export categories with changes in market share]


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Indonesian Economic Policy Priorities

Three policy packages

Fiscal Policy

Significant progress achieved

Investment Climate

Important legislation passed but implementation is lagging

Infrastructure

Significant work still to be done

• A central policy challenge is one of implementation and consistency
• Microeconomic reforms are especially challenging, with inadequate coordination of different government agencies and regions
Priorities for Indonesia

- Improve the macroeconomic, political, legal, and social context
  - Legal system reform
  - Institutional and policy stability
  - Government simplification / professionalism
  - Social safety net versus subsidies
  - Structure for public / private policy coordination

- Upgrade the business environment
  - Infrastructure
  - Skills
  - Special Economic Zones
  - Fast track organizations
  - SOE governance / privatization

- Move to cluster-based economic development

- New approaches for FDI attraction
  - Cluster approach

- Effective regionalization of economic development
  - “Regional economic development agreements”

- Enhance ASEAN economic integration

• National Economic Strategy
Clusters and Public Policy

- Clusters provide a framework for organizing the implementation of public policy and public investments towards economic development.
National Economic Strategy

Value Proposition

- What is the unique competitive position of the nation (or region)?
  - What roles in world and regional economy?
  - What unique value as a business location?
  - For what range and types of businesses and functions can the nation or region be competitive?

Developing Unique Strengths

- What elements of the business environment are essential to the national or regional value proposition?
- What existing and emerging clusters must be mobilized?

Achieving and Maintaining Parity with Peers

- What macro/political/legal/social improvements are necessary to maintain parity with peer countries or regions?
- What areas of the general business environment must improve to maintain parity with peer countries or regions?