Middle-Income Countries in Asia and the Pacific

Challenges and Opportunities

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Developing Asia’s growth

NIEs = newly industrialized economies of Hong Kong, China; Republic of Korea; Singapore; and Taipei, China

Source: Asian Development Outlook database.
Re-emergence of Asia

Asia’s Share of Global GDP, 1700-2010

- Asia accounted for about 60% of world economy before Industrial Revolution
- In the following two centuries:
  - Asia’s share declined to 15%
  - Asia’s share in 2010 was 28%

Asian Growth Rates

- Asia began to re-emerge after 1950, spurred first by Japan, then NICs
- Starting in 1980s, first PRC then India, Indonesia and Viet Nam, gave further boost
Asia and the Pacific: a Global Driver of Growth

2017 World GDP, by Country Share (current PPP, %)

Asia and the Pacific accounts for 42% of global GDP, drives 60% of growth
The Asian Century

Asian Century Scenario: 2050

- Asia: 52%
- North America, 13%
- Latin America & Caribbean, 10%
- Sub Saharan Africa, 2%
- Europe, 18%
- Middle East & North Africa, 3%
- Rest of World, 2%

GDP at market exchange rate (Trillion)

<table>
<thead>
<tr>
<th>Region</th>
<th>GDP (Trillion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>333</td>
</tr>
<tr>
<td>Asia</td>
<td>174</td>
</tr>
<tr>
<td>United States</td>
<td>38</td>
</tr>
</tbody>
</table>

GDP per capita at constant PPP

<table>
<thead>
<tr>
<th>Region</th>
<th>GDP per capita (PPP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>37,300</td>
</tr>
<tr>
<td>Asia</td>
<td>40,800</td>
</tr>
<tr>
<td>United States</td>
<td>94,900</td>
</tr>
</tbody>
</table>

Asian century driven by Asia 7: India, Indonesia, Japan, Malaysia, PRC, Republic of Korea, and Thailand projected to account for 90% of Asia’s growth between 2010 and 2050.
Emergence and Evolution of MICs
Defining MICs

Income classification standards, GNI per capita (US$, Atlas method)

Low-income: <$1,005
Lower middle: $1,006 - $3,955
Upper middle: $3,956 - $12,235
High: >$12,236

Do not completely summarize levels of development but closely related to nonmonetary measures of quality of life.
Stages of development

1. **Stage 1**: Primary agriculture
   - Low income countries in Africa

2. **Stage 2**: Simple manufacturing (domestic)
   - Cambodia

3. **Stage 3**: Supply-chain manufacturing, SMEs, FDI
   - Thailand, Viet Nam

4. **Stage 4**: High-tech industries
   - Technology absorption / technology internalized
   - Korea, Singapore

5. **Stage 5**: Creative and innovative economies
   - US, Japan, many OECD countries

**LOW INCOME**

**MIDDLE INCOME**

**HIGH INCOME**
Snapshot of MICs across regions

- **Asia**
- **Latin America**
- **Africa**

**Income Levels:**
- **High Income**
- **Upper Middle Income**
- **Lower Middle Income**
- **Low Income**
Rapid growth transformed Asia from low to middle income

Population Shares by Income Group

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>58.8</td>
<td>25.6</td>
<td>Middle</td>
<td>75.2</td>
<td>8.7</td>
</tr>
<tr>
<td>Middle</td>
<td>15.5</td>
<td>16.2</td>
<td>High</td>
<td>8.7</td>
<td>8.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.2</td>
</tr>
</tbody>
</table>

World

Developing Asia
Rising number of UMICS and LMICs in developing Asia
Developing Asia by income classification

<table>
<thead>
<tr>
<th>Income Classification</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Income</td>
<td>Cook Islands</td>
</tr>
<tr>
<td><strong>Upper-Middle Income</strong></td>
<td>Azerbaijan, People’s Republic of China, Fiji, Georgia, Kazakhstan, Malaysia, Maldives, Marshall Islands, Nauru, Palau, Thailand, Turkmenistan, and Tuvalu</td>
</tr>
<tr>
<td><strong>Lower-Middle Income</strong></td>
<td>Armenia, Bangladesh, Bhutan, Cambodia, India, Indonesia, Kiribati, Kyrgyz Republic, Lao People’s Democratic Republic, Federated States of Micronesia, Mongolia, Myanmar, Pakistan, Papua New Guinea, Philippines, Samoa, Solomon Islands, Sri Lanka, Tajikistan, Timor-Leste, Tonga, Uzbekistan, Vanuatu, and Viet Nam</td>
</tr>
<tr>
<td>Low Income</td>
<td>Afghanistan and Nepal</td>
</tr>
</tbody>
</table>
Challenges Facing MICs
Hurdling the middle income transition

**Stage 1**
Primary agriculture

Low income countries in Africa

**Stage 2**
Simple manufacturing (domestic)

Cambodia

**Stage 3**
Supply-chain manufacturing, SMEs, FDI

Thailand, Viet Nam

**Stage 4**
High-tech industries

Technology absorption / technology internalized

Korea, Singapore

**Stage 5**
Creative and innovative economies

US, Japan, many OECD countries

LOW INCOME

MIDDLE INCOME

HIGH INCOME
Opportunity cost of failure

Asian Century Scenario

Asia; 52%

Middle East & North Africa, 3%

Sub Saharan Africa, 2%

Europe, 18%

Latin America & Caribbean, 10%

North America; 13%

Rest of World, 2%

Asian GDP: $174 trillion
Asian GDP per capita: $40,800

Middle Income Trap Scenario

Asia; 31%

Middle East & North Africa, 5%

Sub Saharan Africa, 4%

Europe, 28%

North America; 21%

Latin America & Caribbean, 9%

Rest of World, 2%

Asian GDP: $65 trillion
Asian GDP per capita: $20,600
Middle-income challenge?

Number of years elapsed since the economy reached $3000 GDP per capita income (in 2005 PPP $)

Some key challenges faced by MICs

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Economic growth</th>
<th>Environmental sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Eradicating urban poverty</td>
<td></td>
<td>5. Addressing rapid urbanization</td>
</tr>
<tr>
<td>6) Strengthening governance and institutions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(1) GDP growth and inequality

GDP growth vs change in Gini coefficient

\[ y = 0.6948x + 4.9101 \]
\[ R^2 = 0.0962 \]
(2) Asia’s urban poverty challenge

- Two faces of Asian urbanization: economic prosperity of cities and increasing urban poverty
- Out of 2.1 billion urban people in Asia, more than 500 million are urban poor
- Urbanization is closely associated with development, the urban poor will be left behind if their concerns are not accounted for

Source: UN World Cities Report 2016
Meeting the Investment Gaps, 2016-2020
(annual averages)

<table>
<thead>
<tr>
<th></th>
<th>$ billion in 2015 prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Investment</td>
<td>$881</td>
</tr>
<tr>
<td>Gap</td>
<td>$459</td>
</tr>
<tr>
<td>Annual Needs</td>
<td>$1,340</td>
</tr>
</tbody>
</table>

Source: ADB
(4) Economic growth and the environment

**CO₂ Emissions by Region (in million tons)**

- **Asia and the Pacific**: 16,066.7 (47.9%)
- **Africa**: 14,006.5 (44.4%)
- **Middle East**: 11,184.2 (39.2%)
- **Europe and Eurasia**: 7,691.5 (23.1%)
- **South and Central America**: 7,278.8 (33.5%)
- **North America**: 5,364.0 (24.9%)

Yearly emissions from 1965 to 2015 are shown in the graph.
(4) Climate vulnerability in Asia

Asia is more vulnerable to coastal flooding

<table>
<thead>
<tr>
<th>Region</th>
<th>Urban population at Risk (million)</th>
<th>Share of Population at Risk (%)</th>
<th>Urban Area at Risk ('000 km²)</th>
<th>Share of Area at Risk (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>32</td>
<td>11</td>
<td>18</td>
<td>6</td>
</tr>
<tr>
<td>Asia and Pacific</td>
<td>251</td>
<td>18</td>
<td>129</td>
<td>11</td>
</tr>
<tr>
<td>Latin America</td>
<td>24</td>
<td>8</td>
<td>42</td>
<td>6</td>
</tr>
<tr>
<td>Europe</td>
<td>40</td>
<td>7</td>
<td>56</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: ADB estimates based on McGarahan et al. 2007.

Vulnerability will rise with urbanization

Source: Balk and Montgomery (2012).
(4) Most affected Asian countries by climate-related threats

<table>
<thead>
<tr>
<th>Droughts</th>
<th>Floods</th>
<th>Storms</th>
<th>Sea Level rise (1m)</th>
<th>Agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malawi</td>
<td>Bangladesh</td>
<td>Philippines</td>
<td>low-lying Island States</td>
<td>Sudan</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>PRC</td>
<td>Bangladesh</td>
<td>Viet Nam</td>
<td>Senegal</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>India</td>
<td>Madagascar</td>
<td>Egypt</td>
<td>Zimbabwe</td>
</tr>
<tr>
<td>India</td>
<td>Cambodia</td>
<td>Viet Nam</td>
<td>Tunisia</td>
<td>Mali</td>
</tr>
<tr>
<td>Mozambique</td>
<td>Mozambique</td>
<td>Moldova</td>
<td>Indonesia</td>
<td>Zambia</td>
</tr>
<tr>
<td>Niger</td>
<td>Lao PDR</td>
<td>Mongolia</td>
<td>Mauritania</td>
<td>Morocco</td>
</tr>
<tr>
<td>Mauritania</td>
<td>Pakistan</td>
<td>Haiti</td>
<td>PRC</td>
<td>Niger</td>
</tr>
<tr>
<td>Eritrea</td>
<td>Sri Lanka</td>
<td>Samoa</td>
<td>Mexico</td>
<td>India</td>
</tr>
<tr>
<td>Sudan</td>
<td>Thailand</td>
<td>Tonga</td>
<td>Myanmar</td>
<td>Malawi</td>
</tr>
<tr>
<td>Chad</td>
<td>Viet Nam</td>
<td>PRC</td>
<td>Bangladesh</td>
<td>Algeria</td>
</tr>
<tr>
<td>Kenya</td>
<td>Benin</td>
<td>Honduras</td>
<td>Senegal</td>
<td>Ethiopia</td>
</tr>
<tr>
<td>Iran</td>
<td>Rwanda</td>
<td>Fiji</td>
<td>Libya</td>
<td>Pakistan</td>
</tr>
</tbody>
</table>

Note: The typology is based on both absolute effects (e.g., total number of people affected) and relative effects (e.g. number affected as a share of GDP). Source: IPCC data
(4) Economics of climate change

- The costs and risks of climate change is equivalent to losing at least 5-20% of global GDP per year.

- Economics of containing the global warming below 2°C will mean an annual cost of 1% GDP.

- India and SE Asia could lose on average 2-3% and as much as a 9-13% (95 percentile) of GDP by 2100.

- Based on ADB studies, economy-wide loss by 2100 can be as high as:
  - 6.7% of GDP per year for Indonesia, Philippines, Thailand and Viet Nam
  - 8.8% of GDP per year for Bangladesh, Bhutan, India, Maldives, Nepal, Sri Lanka
  - 5.3% of GDP per year for PRC, Japan, Republic of Korea, and Mongolia
(5) Urbanization: growth at an unprecedented rate

- Urban areas account for 84% of global GDP
- Urbanization is expected to grow by 3% annually in Asia
- 600 cities account for 60% of GDP (50% of these cities are in Asia)
- 23 megacities account for 14% of global GDP but will decline to 10% by 2025
- 577 second-tier cities to account for 50% of global GDP by 2025

Climate Change

Drivers of economic growth
Vulnerable to impacts of CC - inundation, sea level rise

Energy

Cities produce 80% of GDP
Cities use about 85% of energy
Asia - 35% CO2 emissions
Air pollution can have estimated 2%-4% negative impact on GDP
(6) Governance and institutions

- Stronger governance and better-performing institutions are fundamental to the overall quality of growth and development.
- Requires solid understanding of local political economy and governance dynamics.
- Governance and institutional reform require long-term support.

State of Governance and Institutions

Opportunities
Productivity-centered growth is needed to reach high income

Contributions to Growth, 1960–2014 (%)

<table>
<thead>
<tr>
<th></th>
<th>Physical capital</th>
<th>Labor</th>
<th>Human capital</th>
<th>Productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle income staying there</td>
<td>55.5</td>
<td>21.9</td>
<td>12.8</td>
<td>9.8</td>
</tr>
<tr>
<td>Middle income rising to high</td>
<td>50.0</td>
<td>10.3</td>
<td>11.4</td>
<td>28.3</td>
</tr>
</tbody>
</table>
Productivity growth will come from innovation.

Research & development stock per labor hour:
- Upper-middle income staying there: 0.3
- Upper-middle income rising to high: 0.9

Patent applications (resident) per million persons:
- Upper-middle income staying there: 44
- Upper-middle income rising to high: 182
Innovation driven by entrepreneurs

Opportunity-driven/Necessity-driven Early-stage Entrepreneurship

Low Income  Middle Income  High Income

Log GDP per capita  Ratio
Entrepreneurs creating more diverse, sophisticated product mix
Human capital investment fuels innovation

Average Schooling Years by Income Group

<table>
<thead>
<tr>
<th></th>
<th>Total Schooling</th>
<th>Tertiary Schooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>9.7</td>
<td>0.57</td>
</tr>
<tr>
<td>Middle</td>
<td>6.1</td>
<td>0.20</td>
</tr>
<tr>
<td>Low</td>
<td>2.9</td>
<td>0.05</td>
</tr>
</tbody>
</table>
Human investment closes the skills gaps with high-income economies

PISA (Science), 2015

- Middle income: 7.7%
- OECD: 1.6%
- % low performers: 46.5%

PISA (Math), 2015

- Middle income: 21.2%
- OECD: 2.9%
- % low performers: 54.5%

OECD = Organisation for Economic Co-operation and Development; PISA = Programme for International Student Assessment
More innovative economies rely on advanced infrastructure

**Electricity-generating capacity**

- Upper-middle income staying there: 56.5
- Upper-middle income rising to high: 94.2

**Internet users**

- Upper-middle income staying there: 10.2
- Upper-middle income rising to high: 28.1

Kilowatt hours per 100 people

Per 100 people
MICs and knowledge economies

A knowledge-based economy is one that has:

- an conducive economic incentive and institutional regime
- Effective and appropriate system of education and skills,
- Effective information and communications technology (ICT)
- Efficient research and development (R&D) and innovation

Source: Innovative Asia: Advancing the Knowledge-based Economy
Knowledge-based economies

- Today's most technologically advanced economies are truly knowledge-based with knowledge generation and the use of knowledge being the key to wealth creation.

- Major OECD countries, where more than 50% of GDP are knowledge-related, exemplify this.

Source: OECD. 1996. The Knowledge Economy.
Success stories: Korea

- R&D as % of GDP: from 0.5% in 1965 to 2.5% in 1997 to 3.7% in 2010.
  - Korea intends to increase this to 5.0% of GDP

- Super ministry combining science and technology and IT: Ministry of Science, ICT and Future Planning

- Government for R&D
  - Republic of Korea Advanced Institute of Science and Technology and Korean Institute of Science and Technology
  - Government incentives for private sector
  - Fiscal and trade policies: tax credits, accelerated depreciation, lowered import tariffs

- Education: 35% of all Korean tertiary graduates earned degrees in engineering, manufacturing or construction disciplines (1999)
Success stories: Singapore

- From labor-intensive growth to skill-intensive growth to technology-intensive growth to knowledge and innovation economy-based growth

- R&D expenditure was 0.5% of GDP in the initial years and has steadily grown to 2.3% of GDP.
  - The country intends to increase it to 3.5% of GDP by 2015.

- Role of Government: Economic Development Board (EDB) and Agency for Science, Technology and Research (A*Star)

- Singapore emerged as a hub of services and further developed new high-growth services capabilities
Success stories: Finland

- 1950s: Finland was still an agriculture-based economy.
- 1990s onward: country firmly established as an innovation-based knowledge economy.
- Broad-based and engaging approach to formulating the education, research, and innovation policy agenda
- 2010-2015: R&D to reach 4% of GDP by 2015
- Support to the ICT sector used a multipronged approach linked funding for R&D
  - enhanced education and human capital development specifically for IT
  - support to state technology agencies and other institutions
  - central focus on ICT as a competitive sector for the economy
Some key lessons

- Enabling systematic and sustained investments in knowledge-based economies
- Moving up the value-added scale in merchandise goods and services
- Important role of government in steering development of knowledge-based economies
- The private sector follows the government to invests in knowledge-based economies
- Removing constraints to innovation and enable knowledge asset creation
How has Asian economies performed as knowledge-based economies?
### Figure 2: Knowledge Economy Index Scores: Selected Economies of Asia and the Pacific

<table>
<thead>
<tr>
<th>Country</th>
<th>Score</th>
<th>Asia and the Pacific Average (4.39)</th>
<th>OECD Average (8.25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taipei, China</td>
<td>9.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hong Kong, China</td>
<td>8.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>8.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td>8.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>8.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>6.90</td>
<td></td>
<td></td>
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<tr>
<td>Thailand</td>
<td>6.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Georgia</td>
<td>5.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Armenia</td>
<td>5.80</td>
<td></td>
<td></td>
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<tr>
<td>Kazakhstan</td>
<td>5.30</td>
<td></td>
<td></td>
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<tr>
<td>Azerbaijan</td>
<td>5.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mongolia</td>
<td>5.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRC</td>
<td>4.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiji</td>
<td>4.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>3.90</td>
<td></td>
<td></td>
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<tr>
<td>Kyrgyz Republic</td>
<td>3.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>3.70</td>
<td></td>
<td></td>
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<tr>
<td>Viet Nam</td>
<td>3.50</td>
<td></td>
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<tr>
<td>Uzbekistan</td>
<td>3.40</td>
<td></td>
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<tr>
<td>Tajikistan</td>
<td>3.30</td>
<td></td>
<td></td>
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<tr>
<td>Indonesia</td>
<td>3.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>3.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>2.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lao PDR</td>
<td>2.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cambodia</td>
<td>2.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nepal</td>
<td>2.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Myanmar</td>
<td>1.40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 8: Education and Skills Subindex Scores


Figure 11: Innovation Subindex Scores

Innovation

Singapore
Taipei, China
Hong Kong, China
Japan
Republic of Korea
Malaysia
PRC
Thailand
Georgia
Fiji
India
Armenia
Azerbaijan
Kazakhstan
Philippines
Indonesia
Uzbekistan
Kyrgyz Republic
Sri Lanka
Mongolia
Pakistan
Viet Nam
Nepal
Tajikistan
Cambodia
Lao PDR
Bangladesh
Myanmar

Asia and the Pacific Average (4.5)
OECD Average (8.49)

Figure 14: Information and Communication Technology Subindex Scores of the Knowledge Economy Index

ICT

Asia and the Pacific Average (4.28)

OECD Average (8.03)


Source: World Bank Knowledge Economy Index with data generation and analysis from ADB. http://go.worldbank.org/JGAO5XE940
Figure 6: Economic Incentive and Institutional Regime Subindex Scores

Economic Incentive and Institutional Regime

Singapore
Hong Kong, China
Taipei, China
Japan
Georgia
Republic of Korea
Armenia
Malaysia
Thailand
Philippines
Mongolia
Sri Lanka
Kazakhstan
PRC
India
Indonesia
Azerbaijan
Viet Nam
Tajikistan
Cambodia
Fiji
Pakistan
Kyrgyz Republic
Bangladesh
Lao PDR
Nepal
Uzbekistan
Myanmar

Asia and the Pacific Average (4.5)

OECD Average (8.46)

What can be done?
Education and skills

- Increasing education for employment and employability
  - Increase attainment levels and raise the quality of education

- Developing flexible systems of education, training and lifelong learning
  - Qualifications and competencies required in the marketplace

- Cater to tech or gray-collar workers
  - New knowledge workers as manufacturing and IT converge

- Expand PPP in education
Education and skills

- Leveraging ICT to extend access and improve education quality
  - Web-based e-learning platforms
  - Massive open online courses (MOOCs)

- Expand centers of excellence in R&D
  - Incentivize industry giants to set up leading research labs

- Create a critical mass of world-standard tertiary education institutions
Innovation

- Increase R&D expenditure to at least 1.5% of GDP
  - Except of PRC, none of emerging economies have R&D investment of 1.5%
  - Needed to advance beyond middle-income levels

- Promote high-impact R&D investments
  - PRC set to overtake the US as the world’s largest R&D investor by 2020
  - but efficiency also needs to be raised

- Steer policies to encourage frugal innovation and innovation for “middle pyramid” consumers
  - Invest in innovation that better fits the specifics needs of the mass markets
Innovation

- Develop innovation intermediaries
  - Proof of concept labs, early stage financing, mentoring, business development support, market scoping, and testing

- Realize the potential of innovation in the services sector
  - Capitalize on offshoring opportunities
  - Invest in innovation capacity
Innovation

- Public sector funding to support commercialization of new technologies by local start ups
  - Examples: Small Business Innovation Research (SBIR) program in US and TEKES in Finland

- Strengthen and update intellectual property protection policies

- Create multiple innovation bases and hubs
  - Innovation districts that link technology, talent and finance
  - Co-located innovation clusters with industrial clusters and economic zones
Innovation

Figure 23: Creative Output Index, 2012

<table>
<thead>
<tr>
<th>Country</th>
<th>Creative Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hong Kong, China</td>
<td>50</td>
</tr>
<tr>
<td>Finland</td>
<td>45</td>
</tr>
<tr>
<td>United States</td>
<td>40</td>
</tr>
<tr>
<td>Singapore</td>
<td>35</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>30</td>
</tr>
<tr>
<td>Japan</td>
<td>25</td>
</tr>
<tr>
<td>PRC</td>
<td>20</td>
</tr>
<tr>
<td>Malaysia</td>
<td>15</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>10</td>
</tr>
<tr>
<td>Indonesia</td>
<td>5</td>
</tr>
<tr>
<td>Thailand</td>
<td>2.5</td>
</tr>
<tr>
<td>Philippines</td>
<td>2</td>
</tr>
<tr>
<td>India</td>
<td>1.5</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>1</td>
</tr>
<tr>
<td>Pakistan</td>
<td>0.5</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>0.25</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>0.1</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Capitalize in Asia’s strong position in creative output

ASEAN = Association of Southeast Asian Nations, PRC = People’s Republic of China.
Source: Calculated from the Creative Intangibles, Creative Goods and Services and Online Creativity indices of INSEAD, Global Innovation Index 2012.
Information and communications technology

- Increase the penetration of ICT
  - A 10 percentage point increase in mobile phone penetration contributes to a 4.2 percentage point increase in total factor productivity

- Tap the power of mobile phones for development
  - 3.5 billion mobile subscriptions in Asia; there are nearly 9 mobile phones for every 10 persons
  - More people have access to mobile networks that with access to electricity at home
  - 2015: Asia and the Pacific will account nearly 30% of global mobile data traffic
Information and communications technology

- Ensure universal, affordable and high-speed broadband
  - Need for comprehensive national broadband policies

- Expand digital literacy and talent for IT

- Adopt cloud based technology devices
  - Cloud computing will generate 10 million jobs in Asia by 2016 (14 million globally)

- Promoting e-government services
Economic incentive and institutional regime

- Improving governance and the role of government
  - Korea and Singapore are good examples
  - Coordinate knowledge economy promotion
  - Accelerate the commercialization of innovation
  - Support creative industries

- Tapping global knowledge
  - Taking part in global value chains
Economic incentive and institutional regime

- Improving intellectual property rights regime
  - Malaysia, Sri Lanka and PRC rank above world average

- Improving efficiency of capital and labor markets
  - Financial underdevelopment limits the availability of credit
ADB Engagement with MICs: Evaluation’s View
ADB operations and total GDP of developing Asia
Yet the share of ADB operations to total GDP of developing Asia has declined since mid-1990s.
New development challenges and opportunities in MICs

New MIC priority development bottlenecks

- Urban chaos, degraded environment
- Low productivity, insufficient economic diversification, limited ability to innovate
- Contagion, climate change, game-changing developments

New opportunities

- South-south cooperation; development knowledge and experience
New thinking in multilateral finance institutions

- Support all member countries (including HICs)
- Tailored approaches
- Expanded product offerings
- Scaled-up operations (*established multilateral financial institutions*)
- No exclusion of countries by income (*new MIC led MFIs*)
New global frameworks

Agreements on Long-term and Global Issues
Lessons at the strategic level

- Engage with MICs to realize a region free of poverty
- Respond to aspirations of growing middle-income class
- As each MIC is unique, it should be treated accordingly
- Provide knowledge solutions and broker knowledge
- Increase support for private sector development and operations

Lessons at the strategic level

- Tailor the country partnership strategies (CPS) in keeping with country context
- Engage in more policy dialogue
- Make CPS more thematically oriented

Lessons from consultations with MIC clients

- MICs acknowledge benefits of engaging with ADB, but the need for ADB financing reduces as economies mature

- ADB could improve its development effectiveness if:
  - ADB’s processes and procedures are simplified and aligned with country systems
  - ADB can help address new development challenges

Source: IED led and SPD led country consultations
Strategic directions for ADB

1. Anchoring finance on knowledge

2. Scaling-up operations and targeting to specific MIC needs

3. Decisively supporting private sector and PPP
1. Anchoring finance on knowledge

To provide knowledge solutions, ADB needs:

- Subject matter expertise
- Knowledge database: accessible, relevant and updated
- Tacit knowledge: to capture in a database, or to be easily accessed when required
- Knowledge sharing: the essence
2. Scaling up operations and targeting specific MIC needs

<table>
<thead>
<tr>
<th>Urbanization</th>
<th>Environment and climate change</th>
<th>Productivity, competitiveness, innovation</th>
<th>Regional and global public goods</th>
<th>South-south cooperation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
3. Decisively supporting private sector and PPP

The environment is conducive for increasing the role of private sector. This calls for:

- Improving business climate and supporting investment (e.g., infrastructure / PPP)
- Encouraging private sector investment where it would otherwise not go (e.g., corporate social responsibility, global and regional public goods)
- Increasing competition (e.g., consumer goods)
Thank you!