Middle-Income Countries in Asia and the Pacific

Challenges and Opportunities

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OUTLINE

1. The Re-Emergence of Asia

2. Asia's Middle-Income Transition

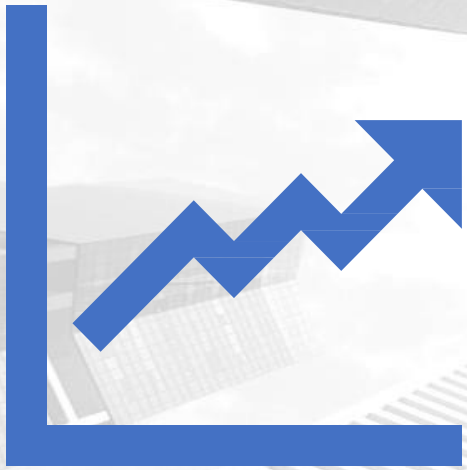
3. Challenges

4. Opportunities

5. ADB Engagement with MICs

7 key things we will learn today

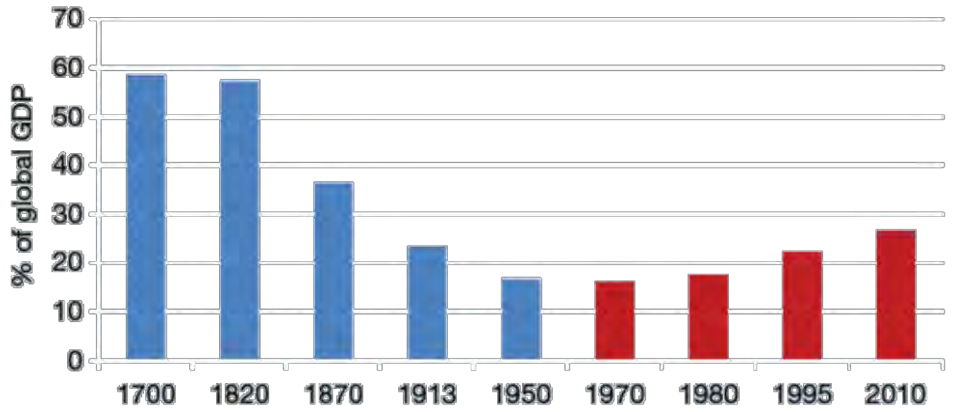
1. **Our global economy and Asia's role:** how the global economy has evolved and Asia's contribution to it (past, present, future)
2. **Stages of development and income levels:** stages of economic development, country income levels and classifications
3. **The emerging middle:** how many countries in Asia transitioned from low to middle income
4. **Challenges:** the major social, economic, environmental and other challenges facing MICs
5. **Opportunities:** the key opportunities for MICs to further grow and develop
6. **Success stories:** examples of countries that have effectively made the MIC-HIC transition
7. **ADB's role and response:** how ADB is trying to help address the unique needs of MICs



1. The Re-Emergence of Asia

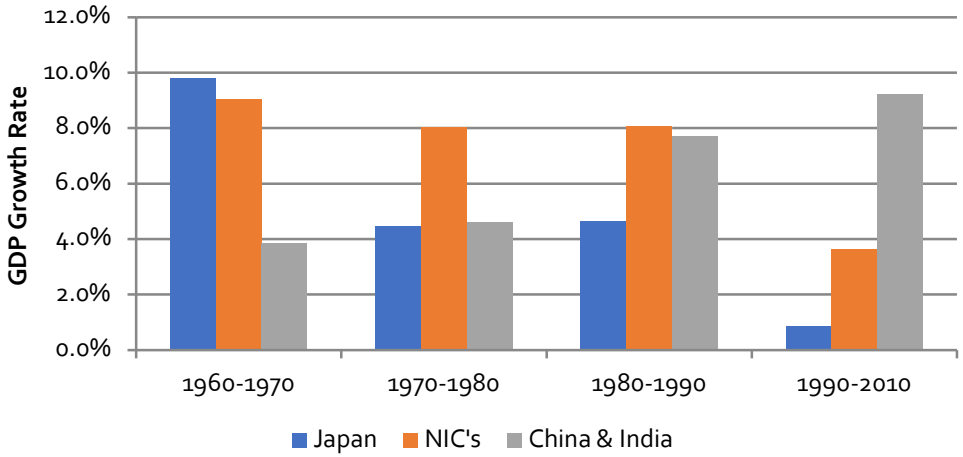
Re-emergence of Asia

Asia's Share of Global GDP, 1700-2010



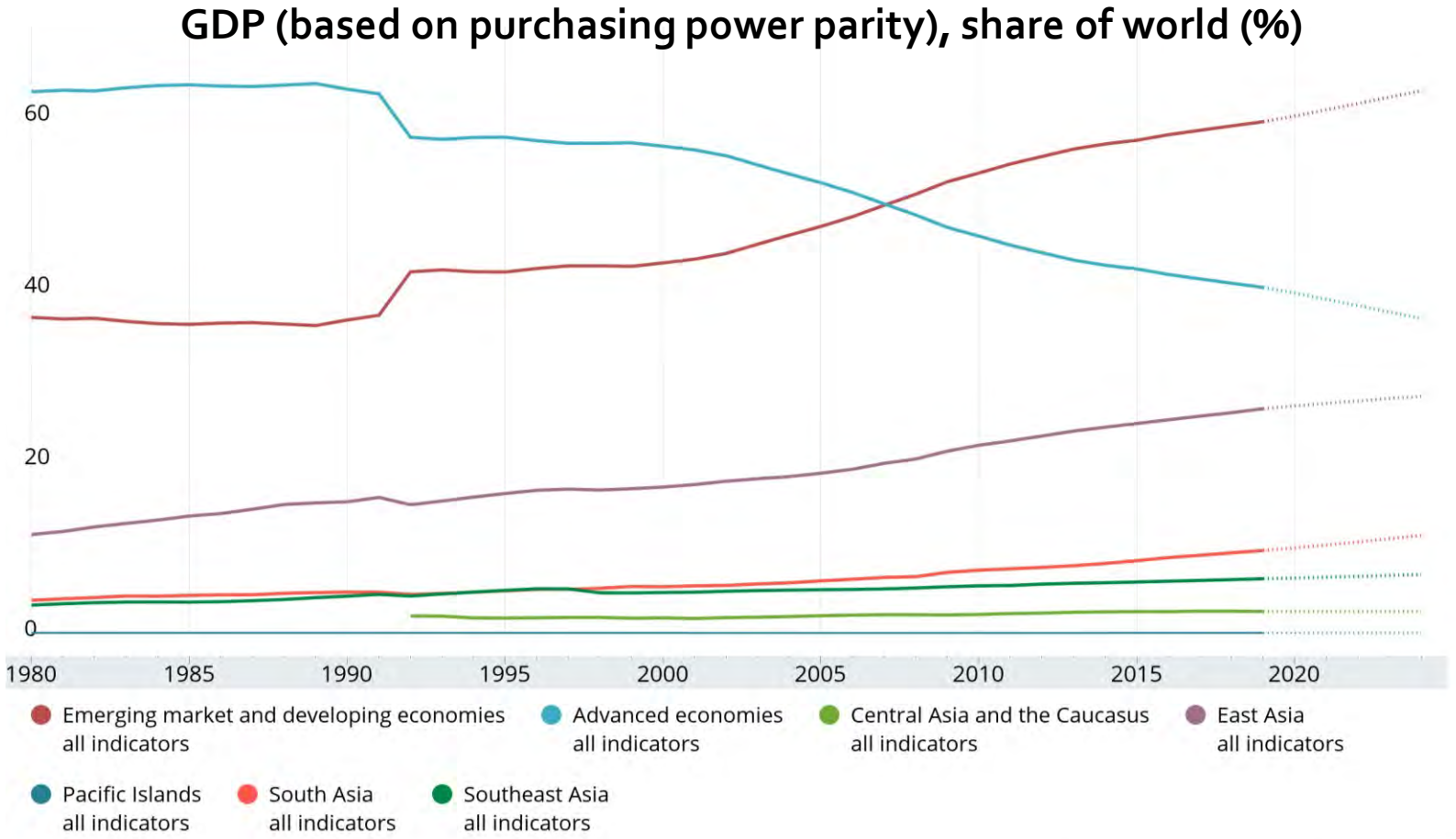
- Asia accounted for about 60% of world economy before Industrial Revolution
- In the following two centuries:
  - Asia's share declined to 15%
  - Asia's share in 2010 was 28%

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

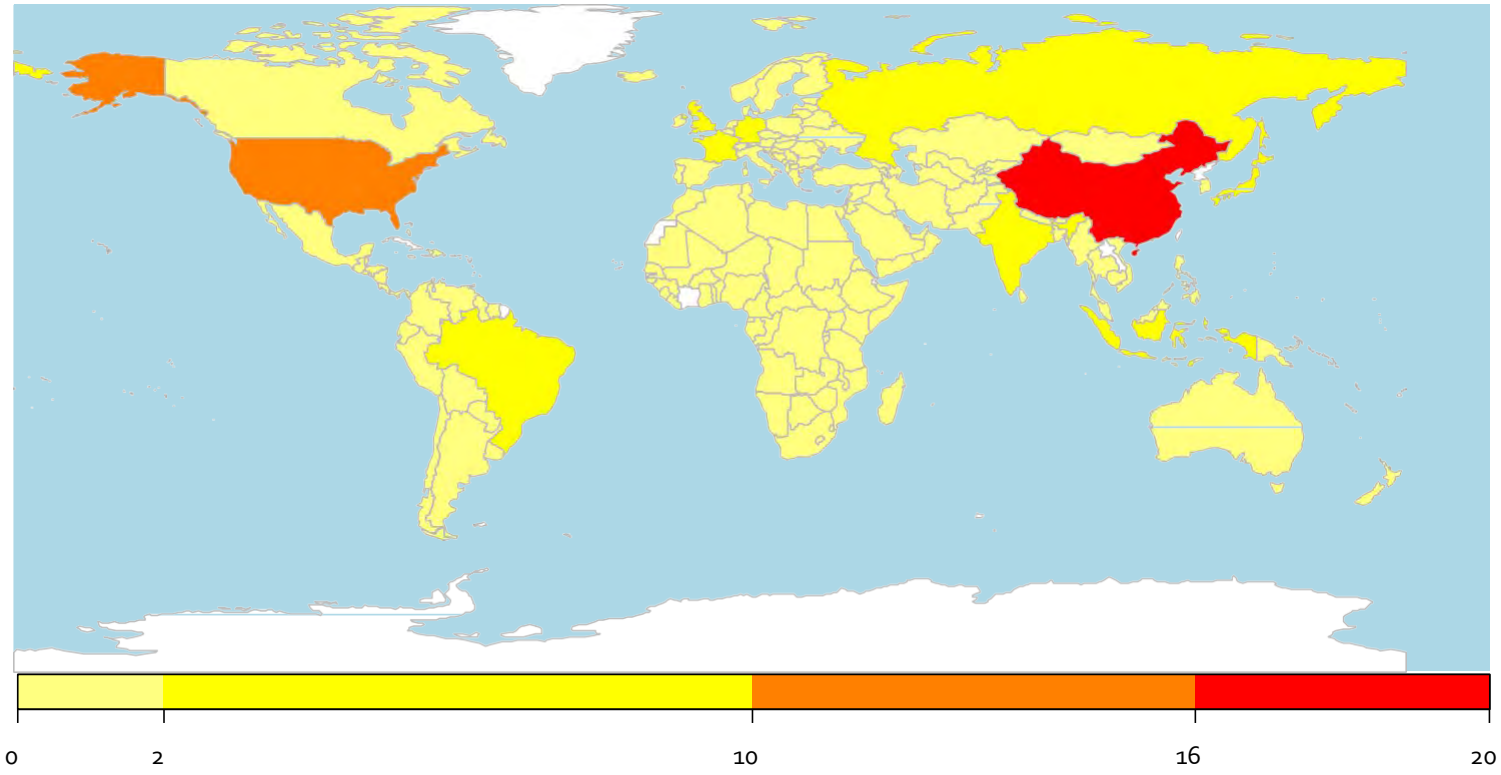
Asia and Pacific: Global Driver of Growth



©IMF, 2019, Source: World Economic Outlook (October 2019)

Asia and Pacific: Global Driver of Growth

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

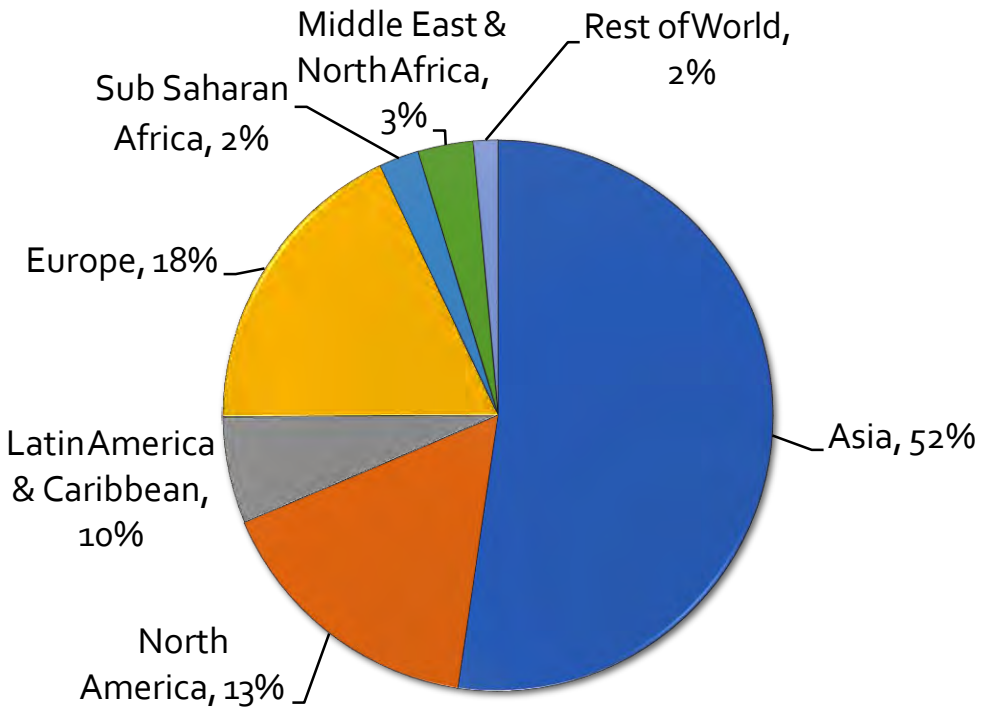


Asia and the Pacific accounts for **42%** of global GDP, drives **60%** of growth

Source: IMF-WEO

The Asian Century

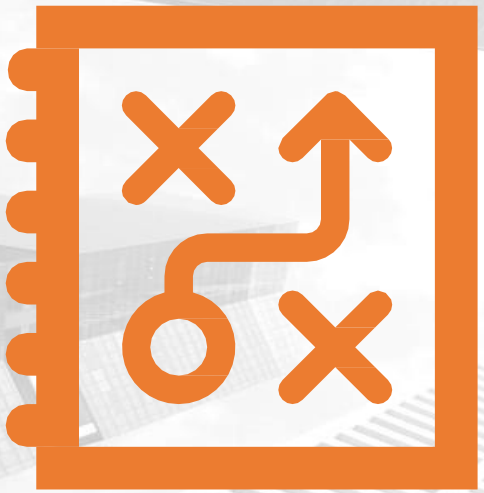
Asian Century Scenario: 2050



GDP at market exchange rate (Trillion)	
World	333
Asia	174
United States	38

GDP per capita at constant PPP	
World	37,300
Asia	40,800
United States	94,900

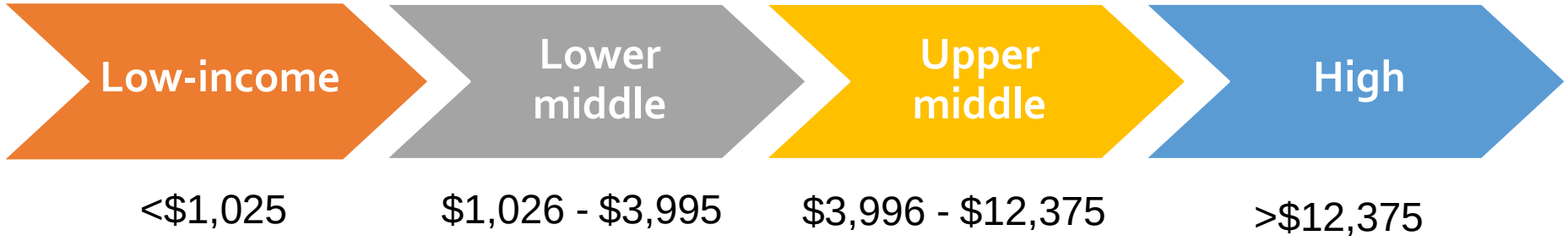
Asian century driven by Asia 7: India, Indonesia, Japan, Malaysia, PRC, Republic of Korea, and Thailand projected to account for 90% of Asia's growth between 2010 and 2050.



2. Asia's Middle-Income Transition

Defining MICs

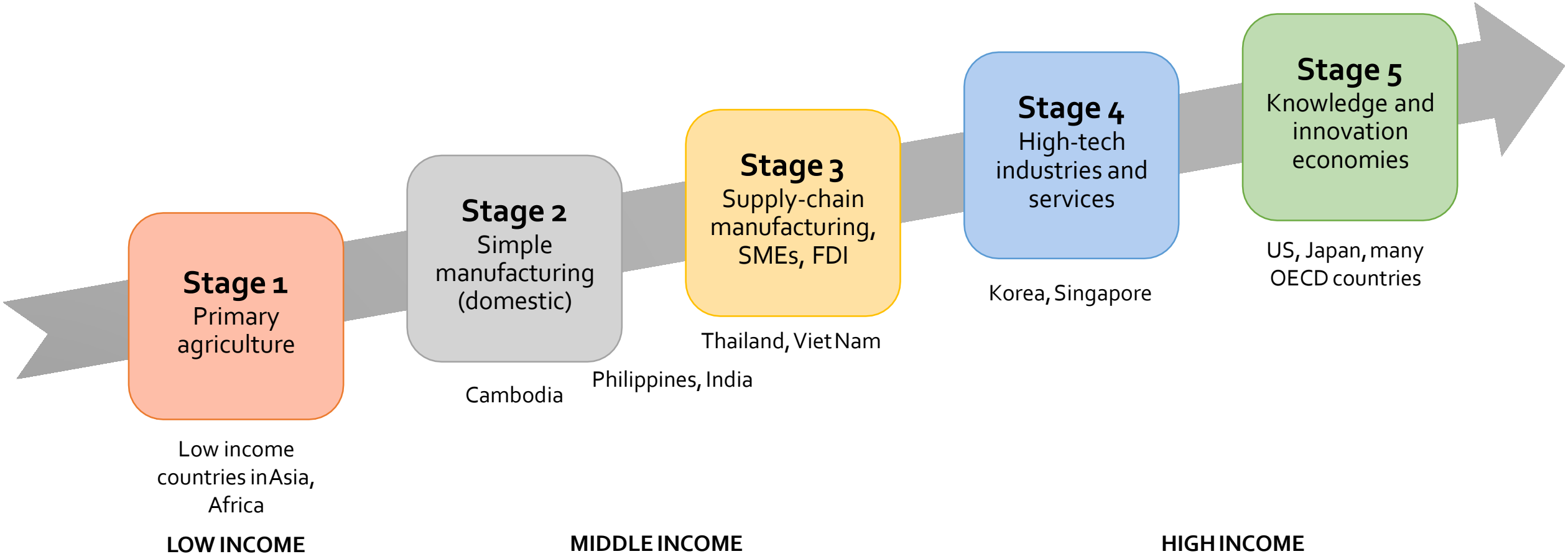
Income classification standards, GNI per capita (US$, Atlas method)



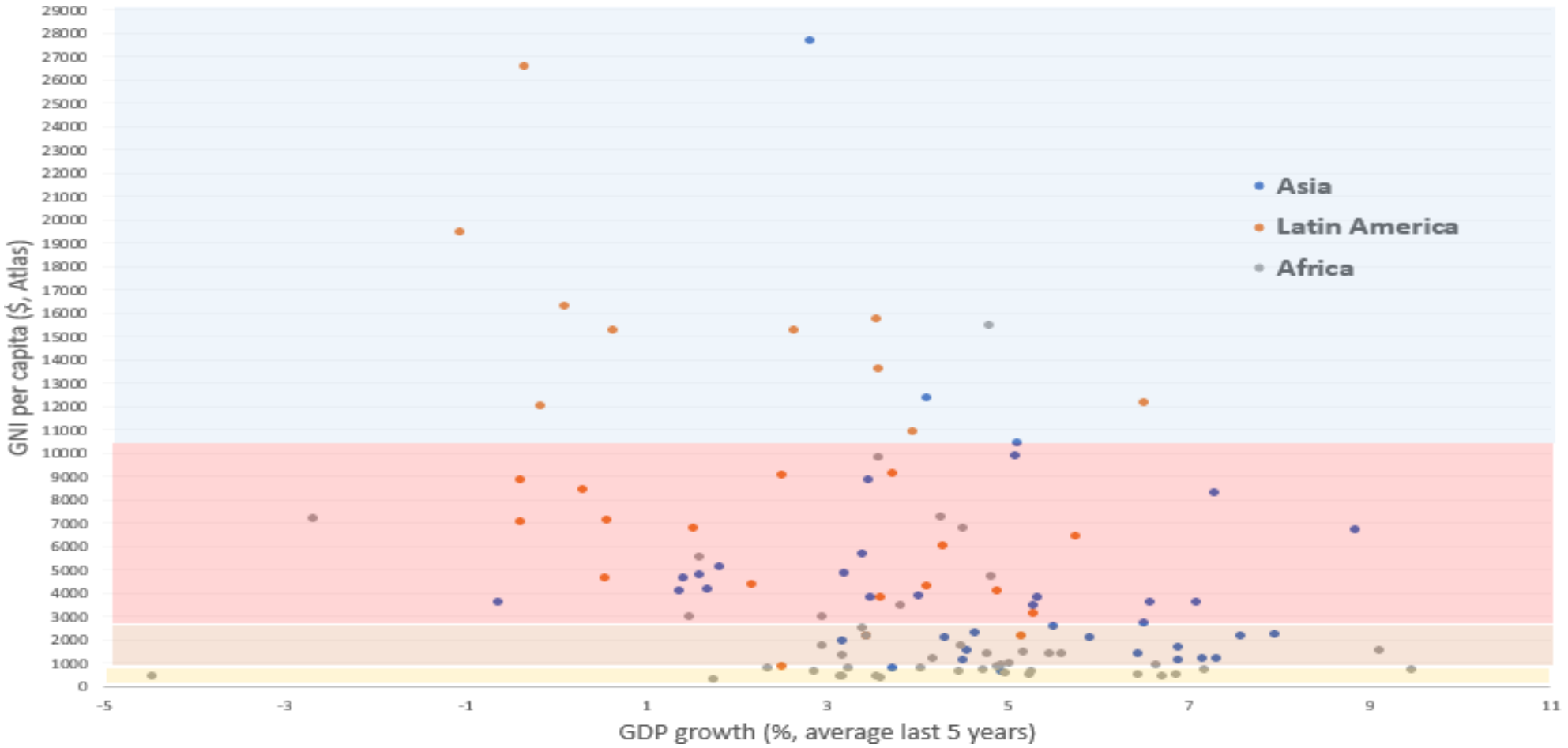
Do not completely summarize levels of development but closely related to nonmonetary measures of quality of life

Source: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups

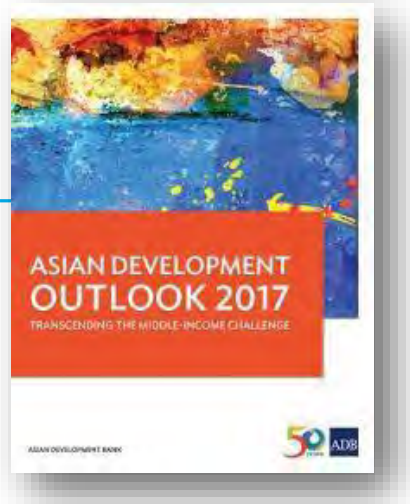
Stages of development



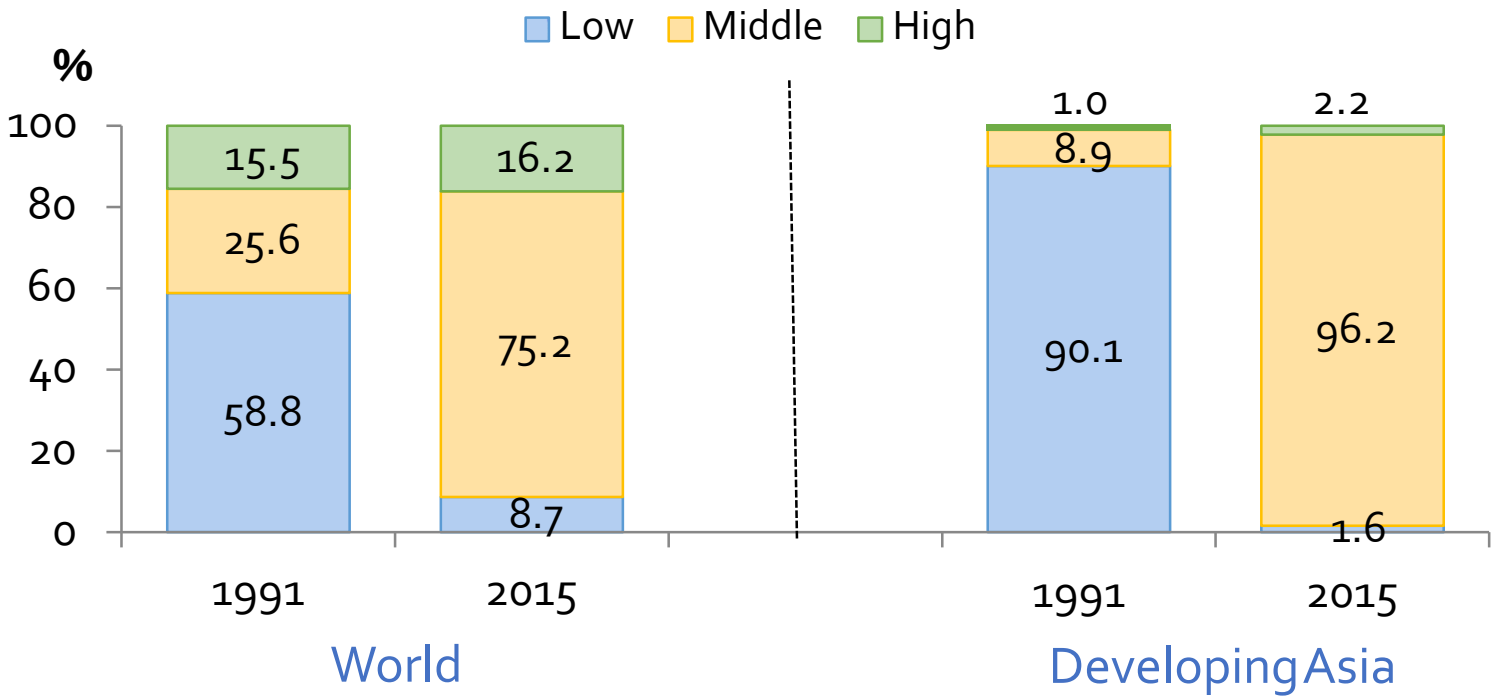
Snapshot of MICs across regions



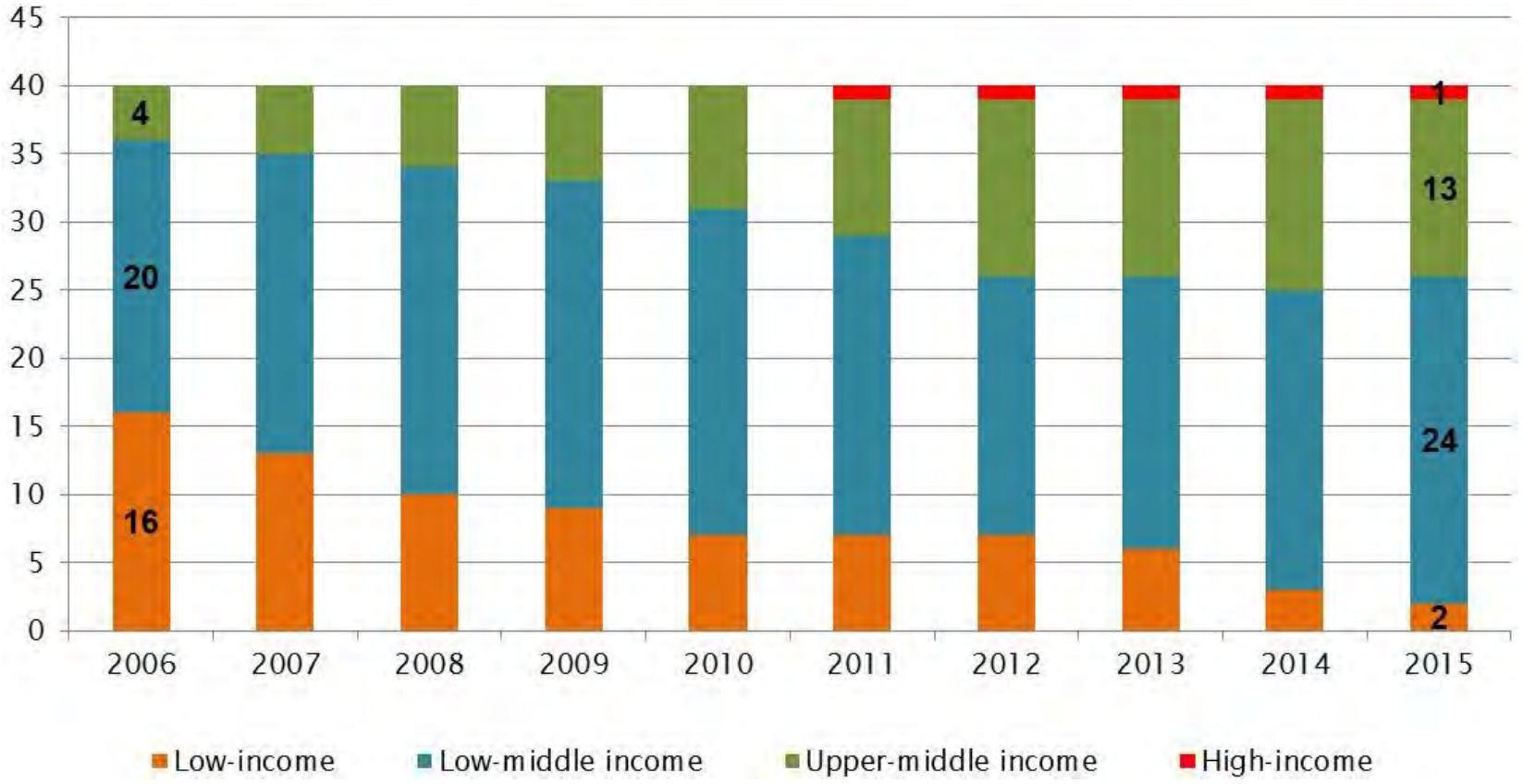
Rapid growth from low to middle income



Population Shares by Income Group



Rapid growth from low to middle income



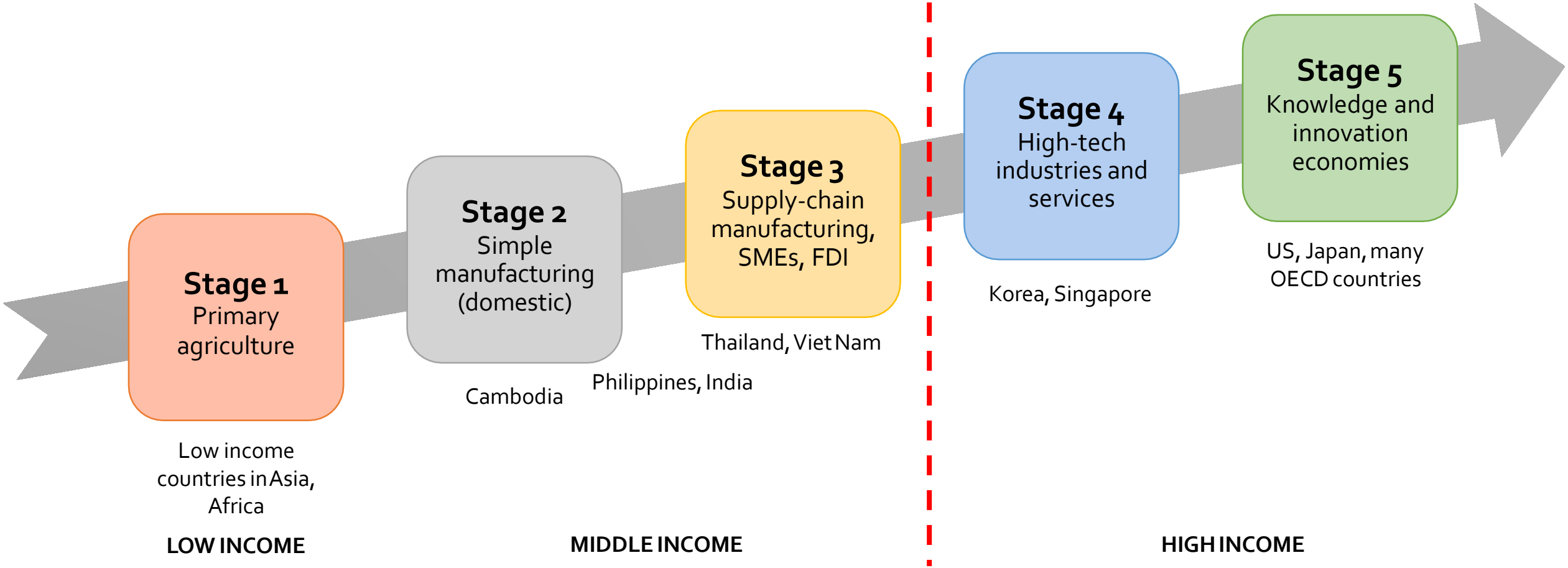
Developing Asia by income classification(2018)

Income Classification	Country
High Income (2)	Cook Islands, Palau
Upper-Middle Income (16)	Armenia, Azerbaijan, People's Republic of China, Fiji, Georgia, Kazakhstan, Malaysia, Maldives, Marshall Islands, Nauru, Samoa, Sri Lanka, Thailand, Tonga, Turkmenistan, and Tuvalu
Lower-Middle Income (19)	Bangladesh, Bhutan, Cambodia, India, Indonesia, Kiribati, Kyrgyz Republic, Lao People's Democratic Republic, Federated States of Micronesia, Mongolia, Myanmar, Pakistan, Papua New Guinea, Philippines, Solomon Islands, Timor-Leste, Uzbekistan, Vanuatu, and Viet Nam
Low Income (3)	Afghanistan, Nepal, Tajikistan

Source: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups

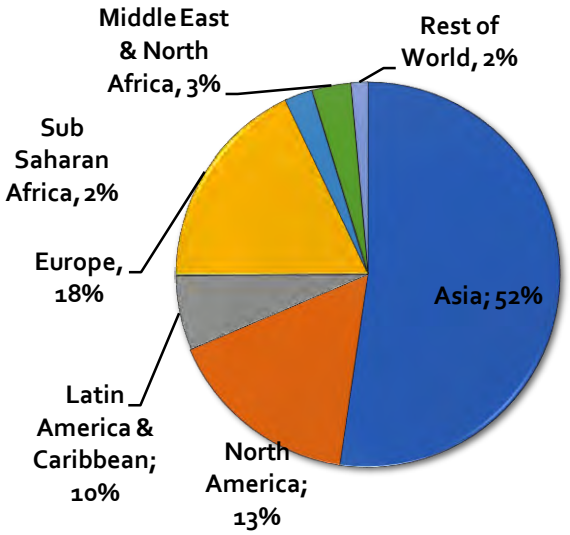
3. Challenges

Hurdling the middle income transition



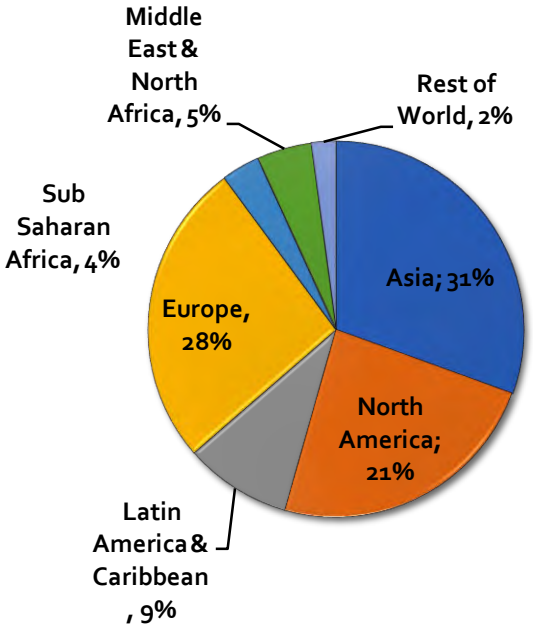
Opportunity cost of failure

Asian Century Scenario



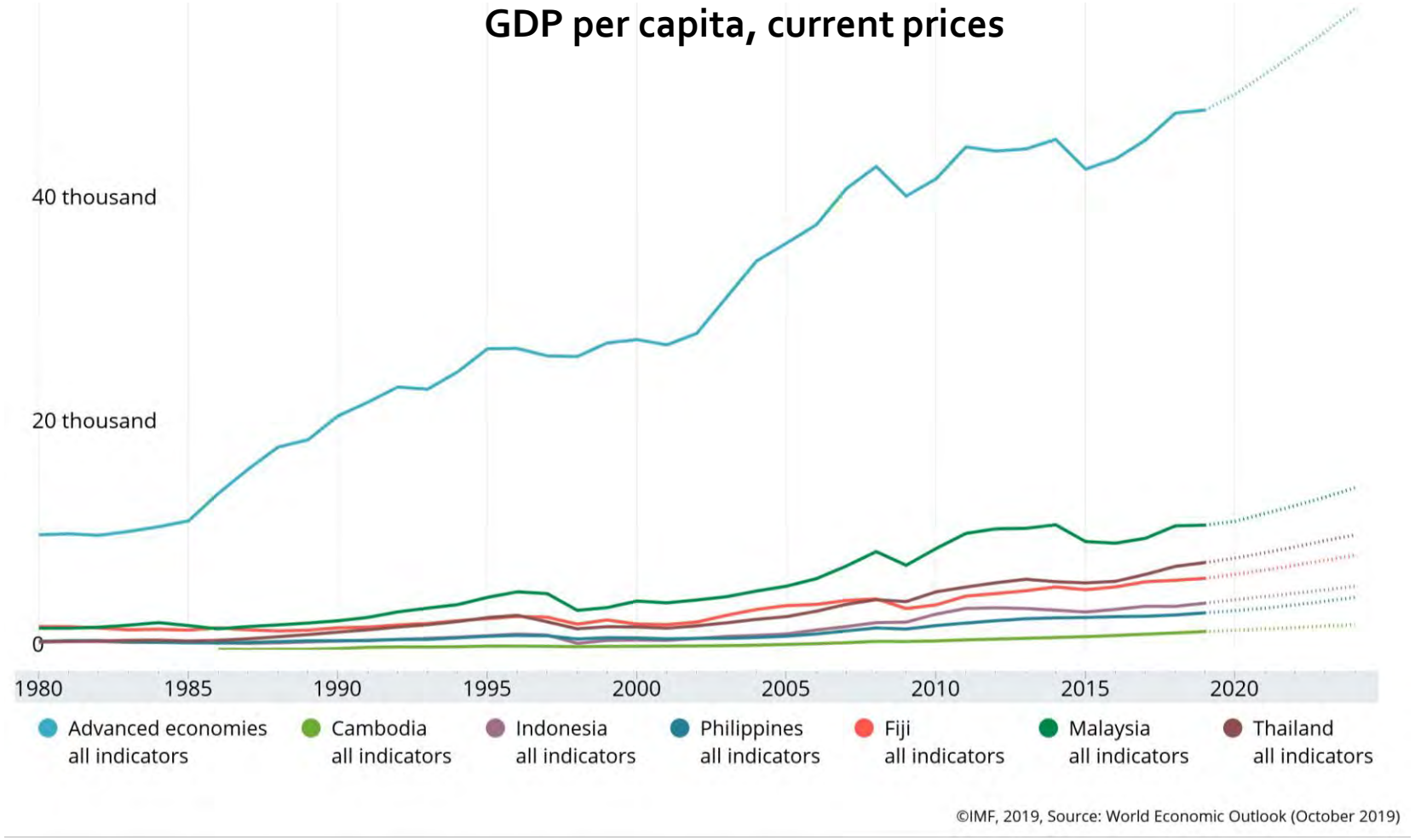
Asian GDP: $174 trillion
Asian GDP per capita: $40,800

Middle Income Trap Scenario



Asian GDP: $65 trillion
Asian GDP per capita: $20,600

Middle-income challenge?

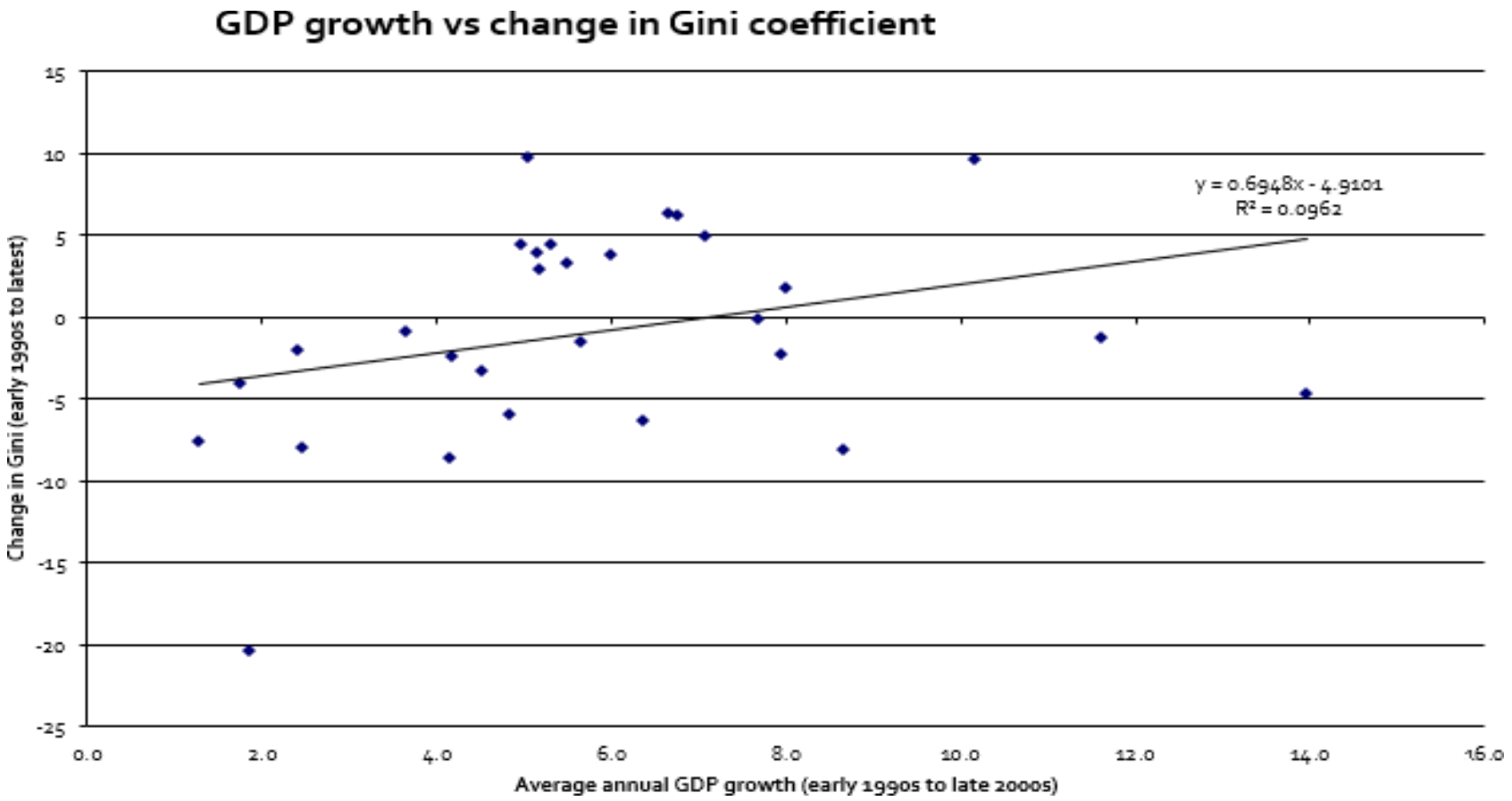


Some key challenges faced by MICs

Inclusion	Economic growth	Environmental sustainability
1. Reducing inequality 2. Eradicating urban poverty	3. Tapping private sector for development	4. Arresting environmental degradation and climate change 5. Addressing rapid urbanization

6) Strengthening governance and institutions

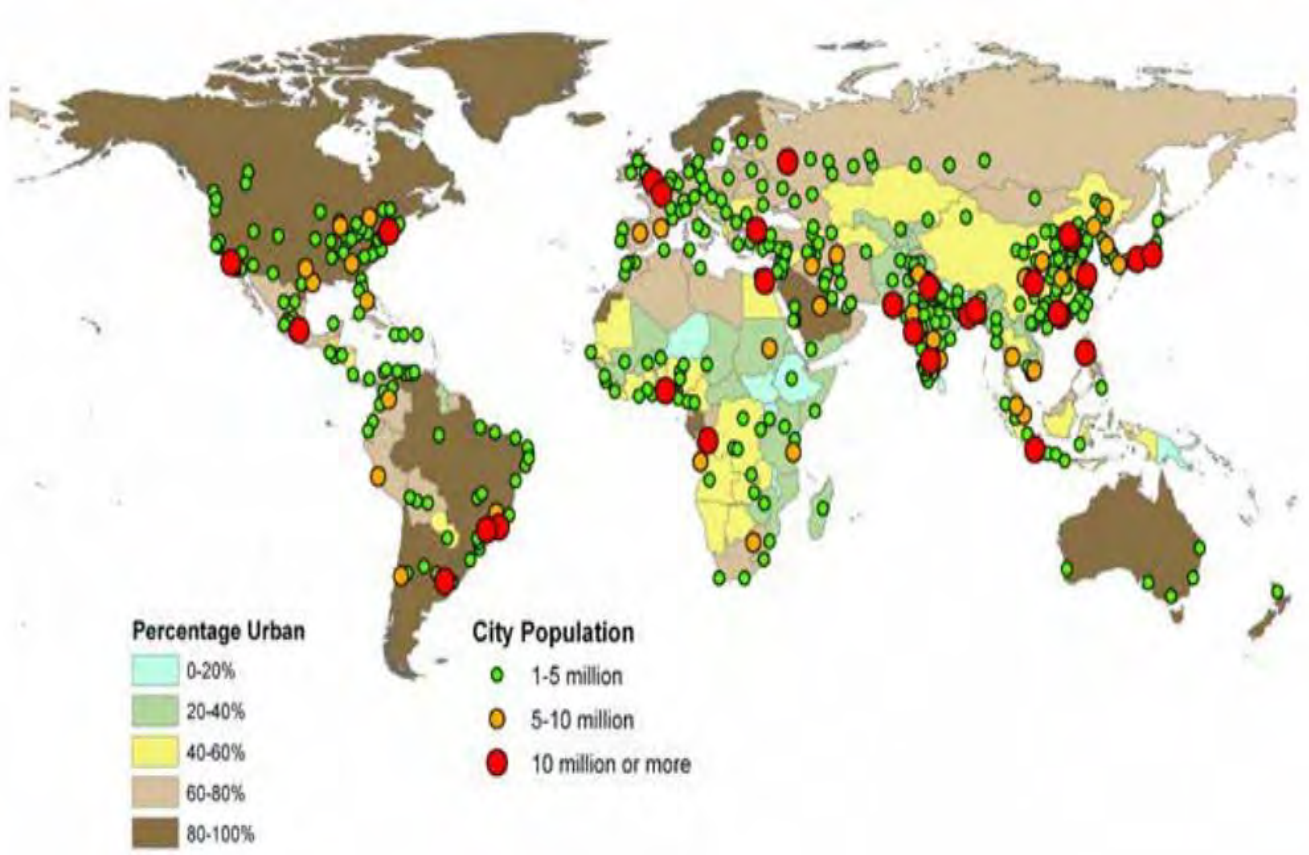
(1) GDP growth and inequality



(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

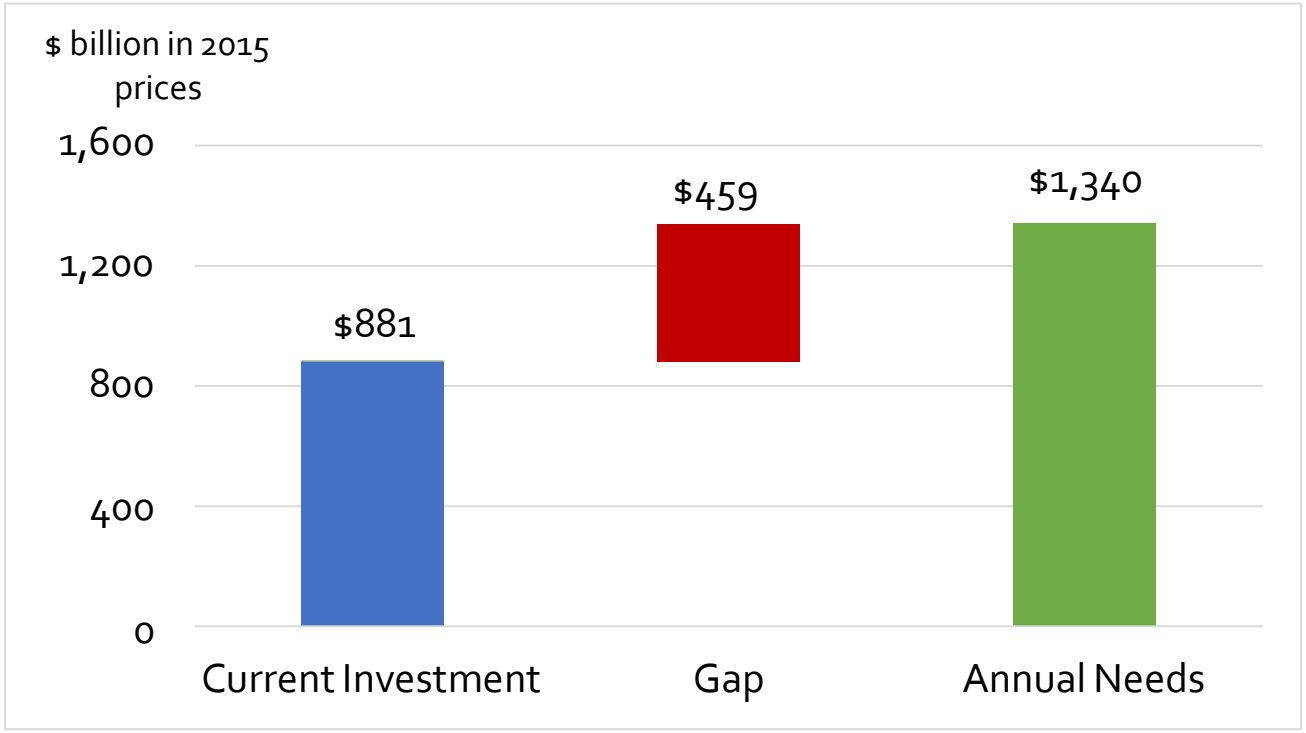
Global Patterns of Urbanization, 2015



Source: UN World Cities Report 2016

(3) Private sector financing needed

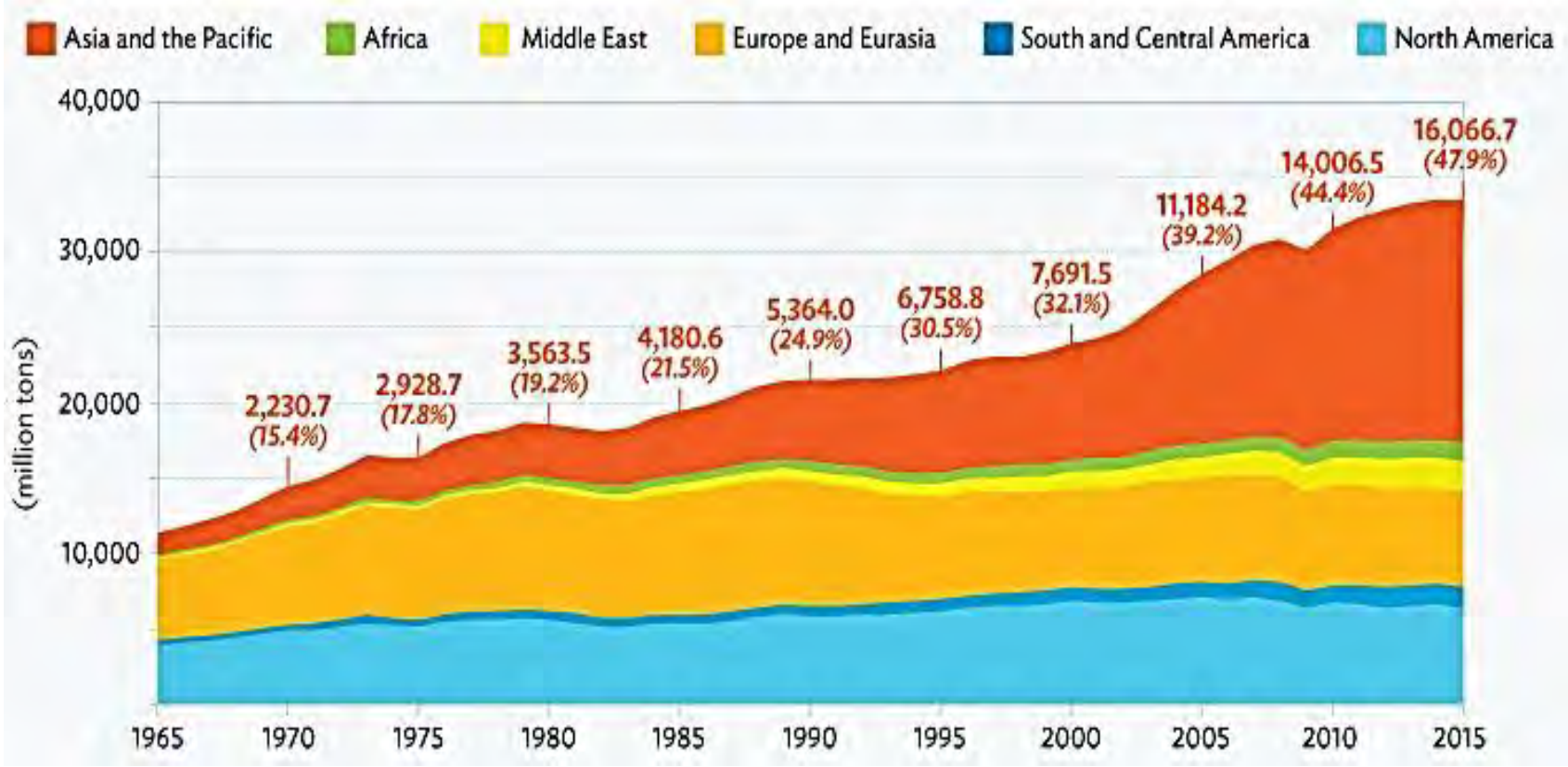
Meeting the Investment Gaps, 2016-2020 (annual averages)



Source: ADB

(4) Economic growth and the environment

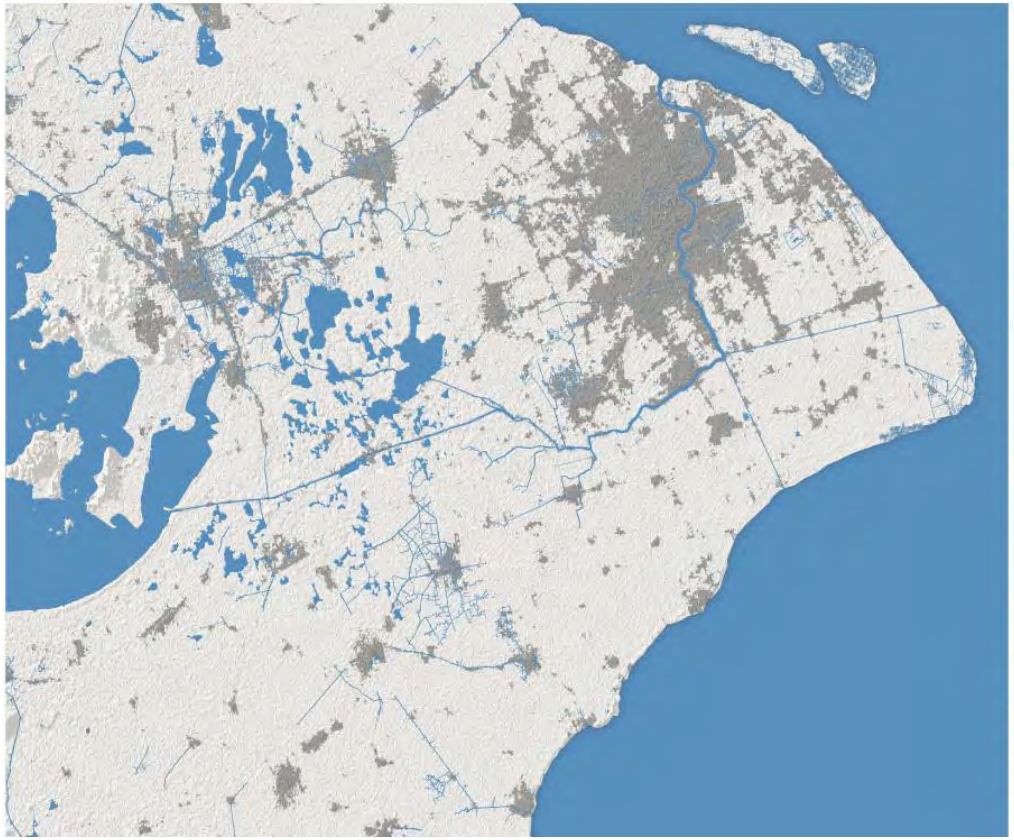
CO_2 Emissions by Region (in million tons)



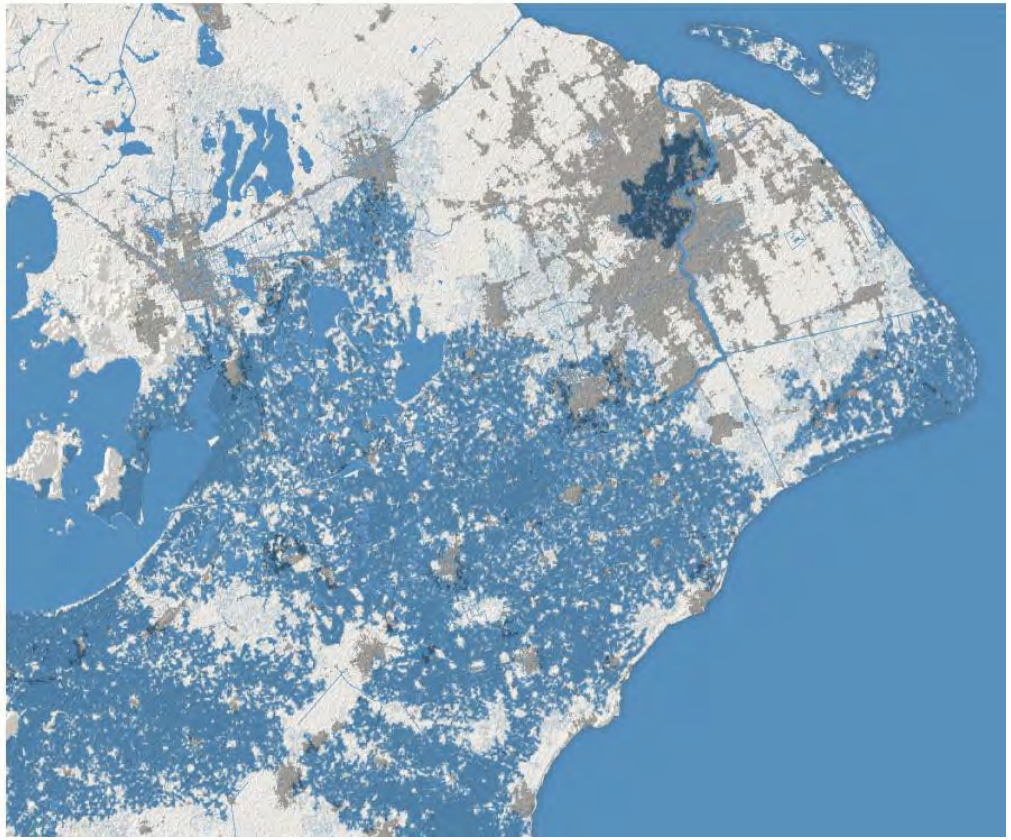
(4) Climate vulnerability

Shanghai flood projections

Old projection for 2050



New projection for 2050



https://www.nytimes.com/interactive/2019/10/29/climate/coastal-cities-underwater.html

(4) Climate vulnerability

- The costs and risks of climate change is equivalent to losing at least 5-20% of global GDP per year, and this will only increase
- 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 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
- For low-lying countries and regions, impacts are likely to be catastrophic

(5) Rapid urbanization

- Rapid and unplanned urbanization now a major problem across many countries
- Even in small Pacific islands, rapid urbanization creating problems
- This presents a complexity of issues to be addressed
- Not just first-tier cities: 577 second-tier cities to account for 50% of global GDP by 2025

Source: McKinsey Global Institute. 2011. *Urban world: Mapping of the economic power of cities*.

Economy

Cities produce 80 % of GDP
Drivers of economic growth

Vulnerable to impacts of CC- inundation, sea level rise

Energy

Cities use about 85% of energy
Asia - 35% CO_2 emissions

Air pollution can have estimated 2%-4% negative impact on GDP

Asian URBAN Challenge

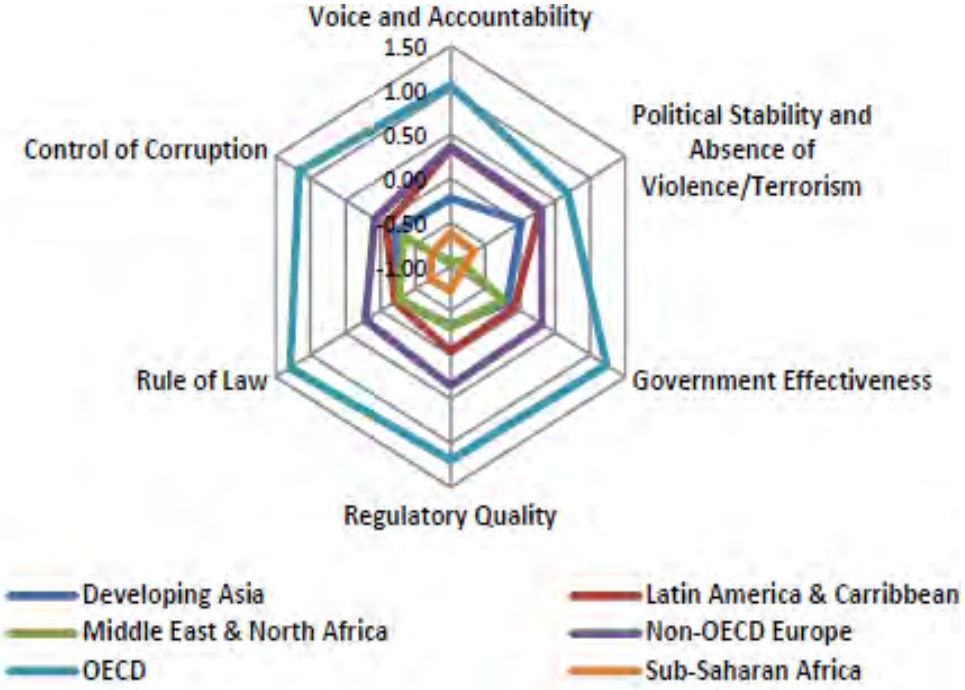
Climate Change

Environment

(6) Governance and institutions

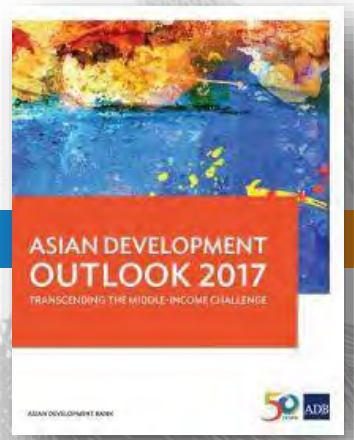
- Stronger governance and better-performing institutions are fundamental to the overall quality of growth and development
- Strengthening governance and institutions is a long-term, arduous endeavor
- Complex relationships between different dimensions of governance and development—requires strong understanding of political, social, cultural contexts

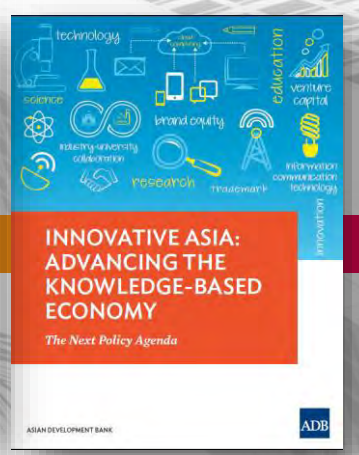
State of Governance and Institutions



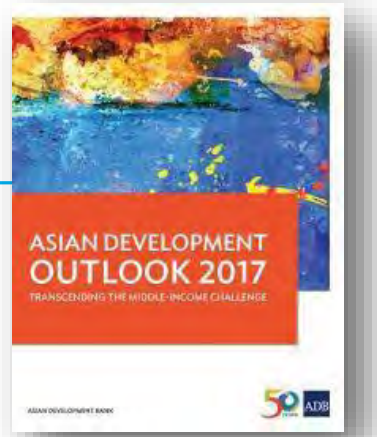
OECD = Organisation for Economic Co-operation and Development.
Source: World Bank. Worldwide Governance Indicators.

4. Opportunities

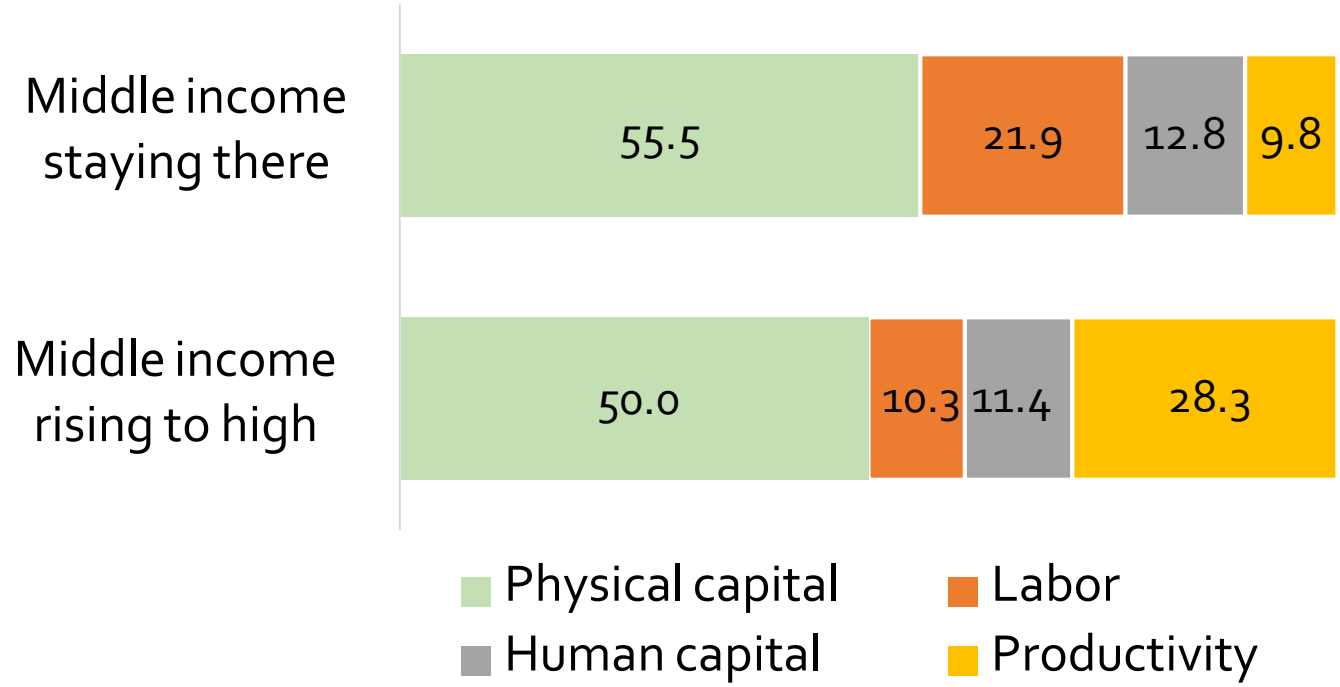




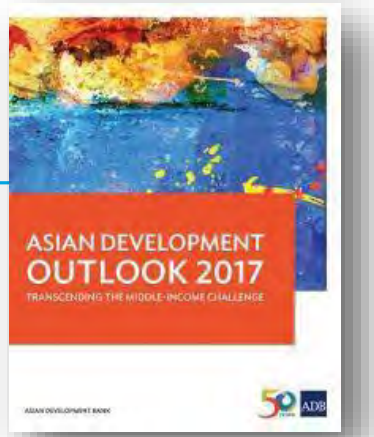
Productivity-centered growth is needed…



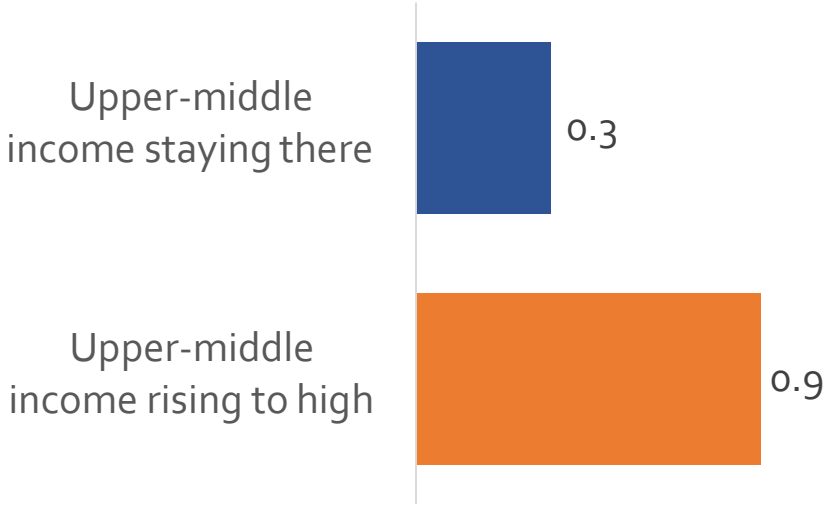
Contributions to Growth, 1960–2014 (%)



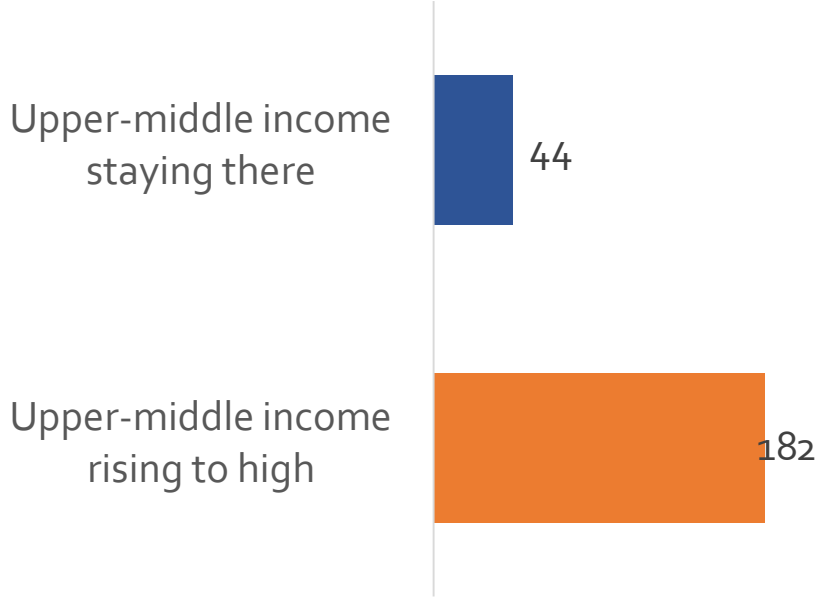
…driven by innovation…



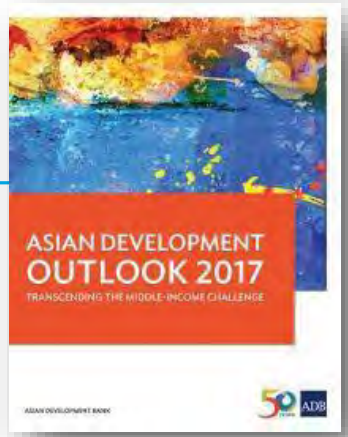
Research & development stock per labor hour

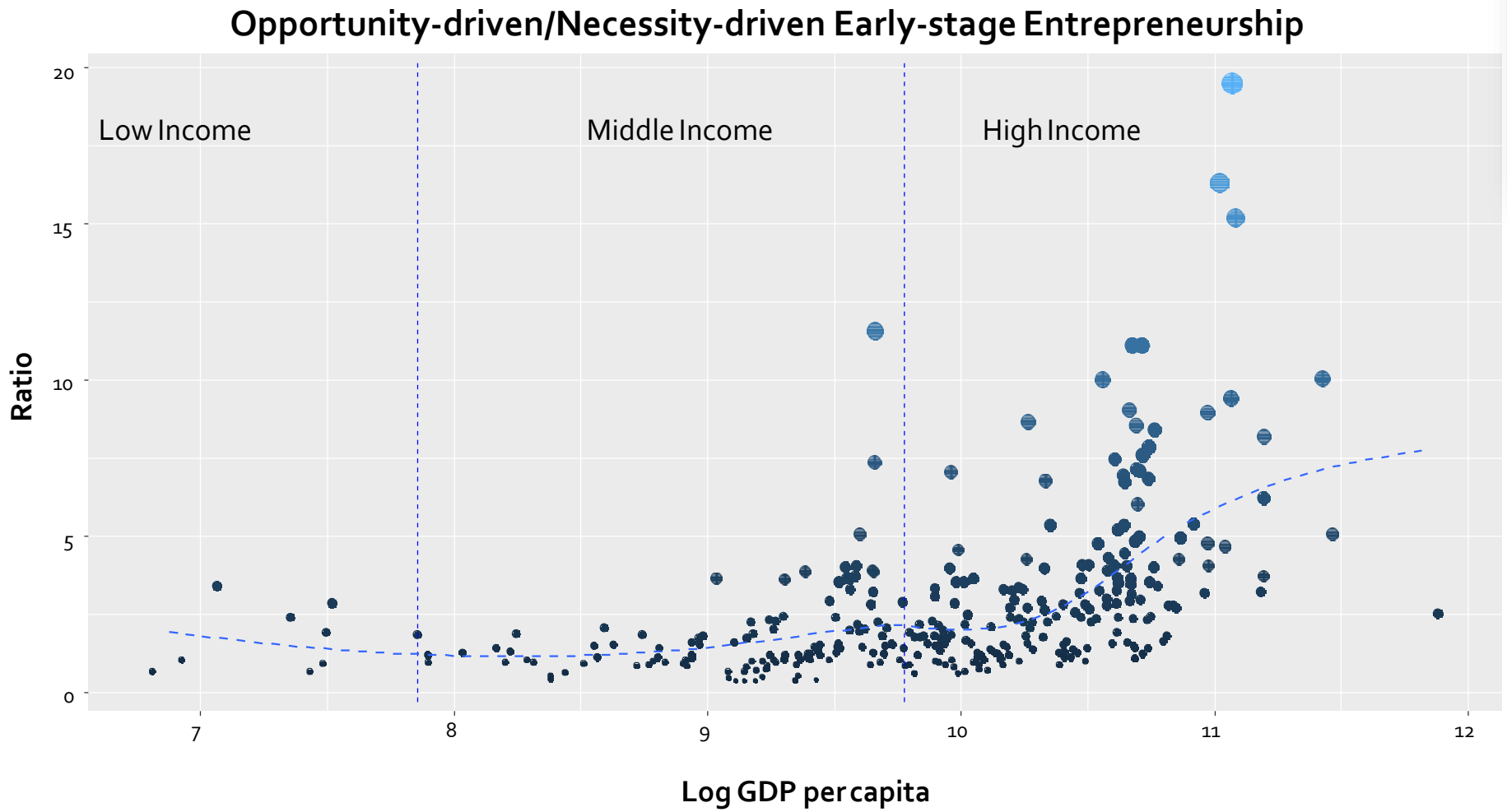


Patent applications (resident) per million persons

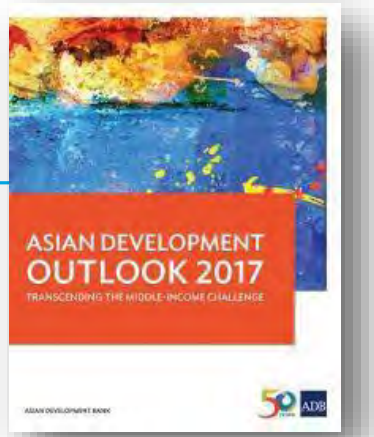


…led by entrepreneurs…

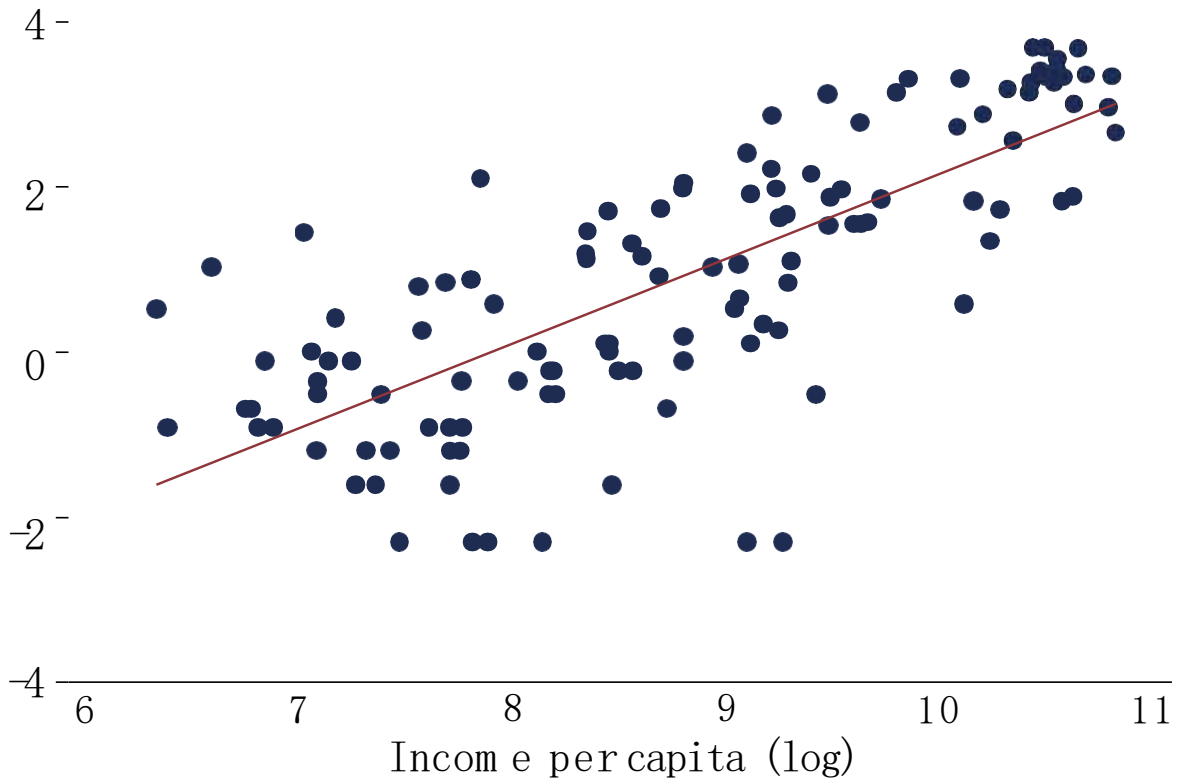




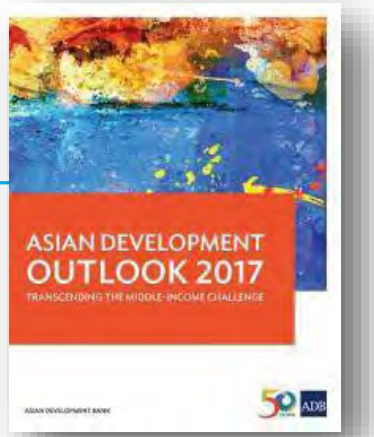
… that are creating more sophisticated products.



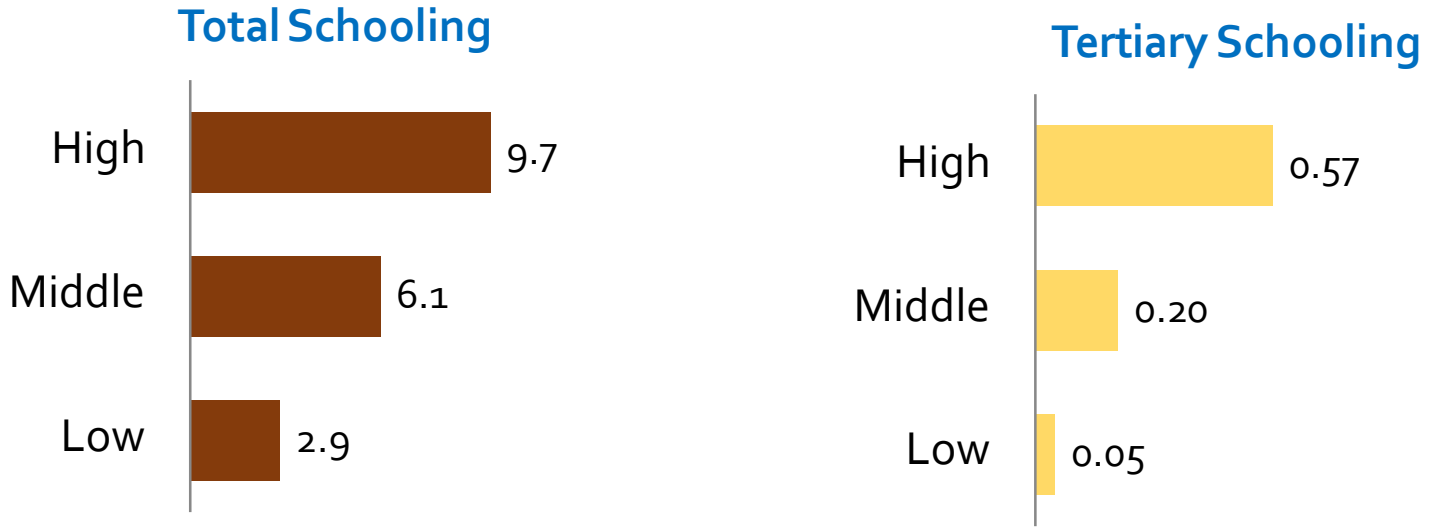
Share of Most Complex Exports



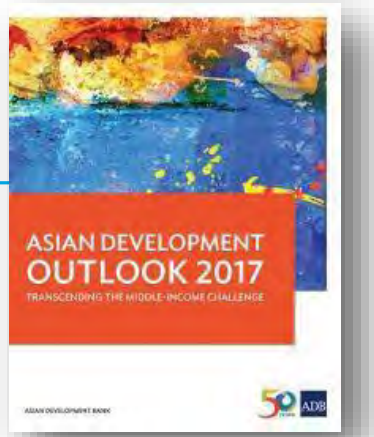
Human capital investment fuels innovation…



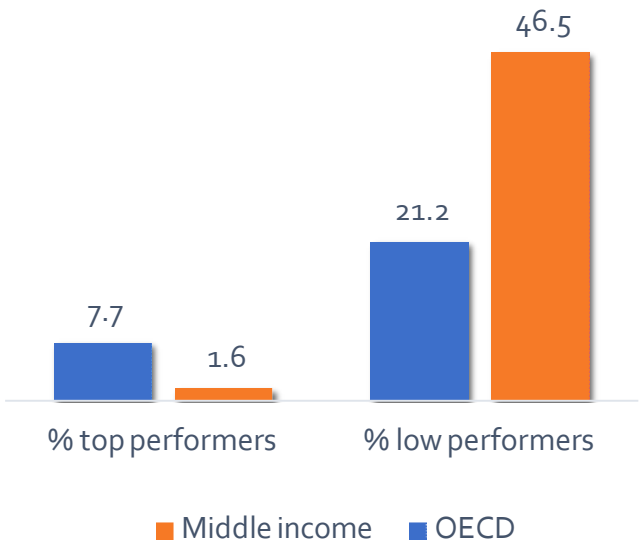
Average SchoolingYears by Income Group



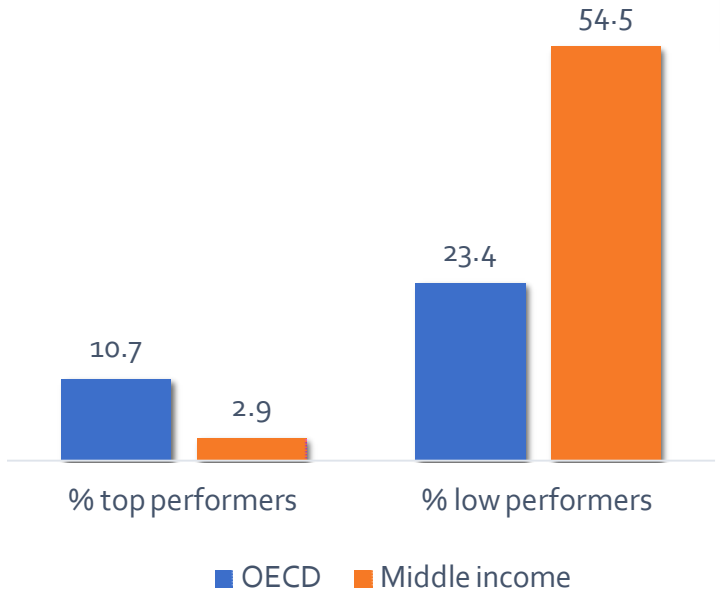
…and closes the skills gap.



PISA (Science), 2015

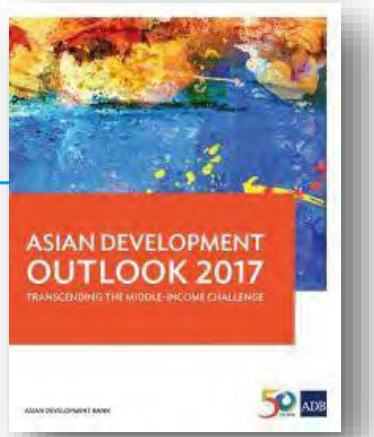


PISA (Math), 2015

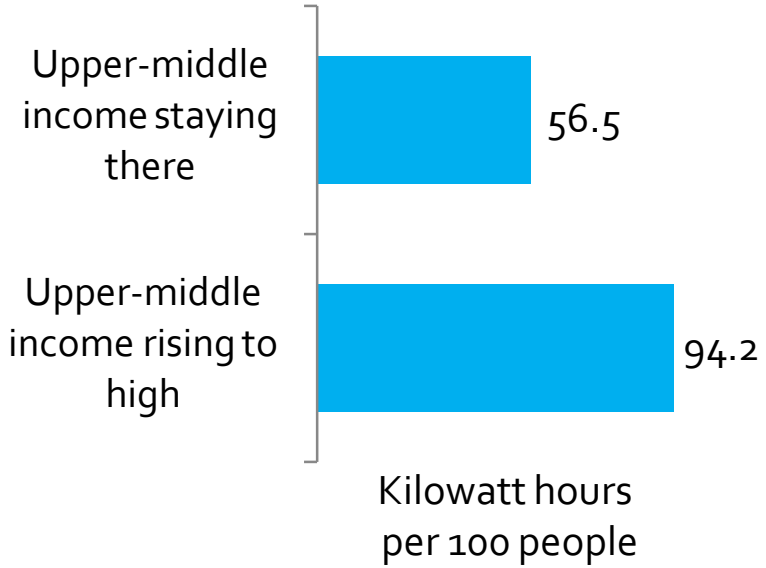


OECD = Organisation for Economic Co-operation and Development; PISA= Programme for International Student Assessment

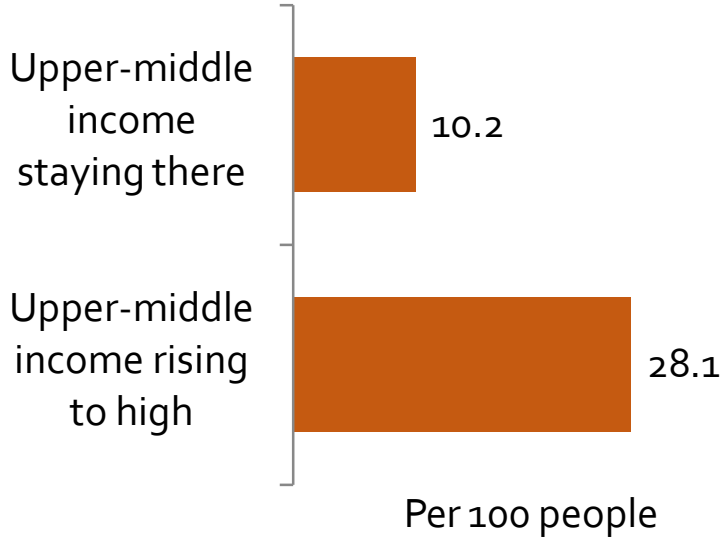
Investing in infrastructure is essential



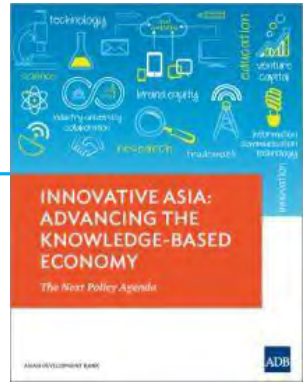
Electricity-generating capacity



Internet users



Knowledge-based economies

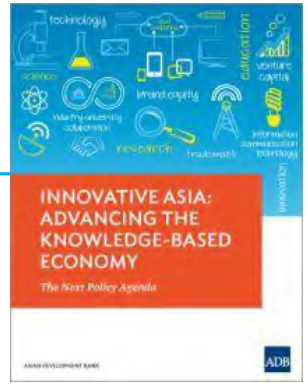


A knowledge-based economy is one that has:

- A 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

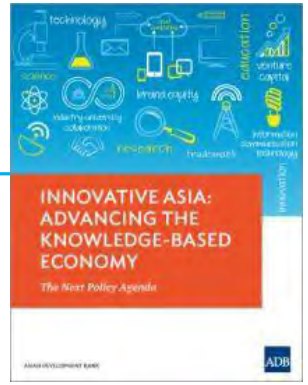


- Today's most technologically advanced economies are truly knowledge-based with knowledge generation and the use of knowledge being the key to wealth creation

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

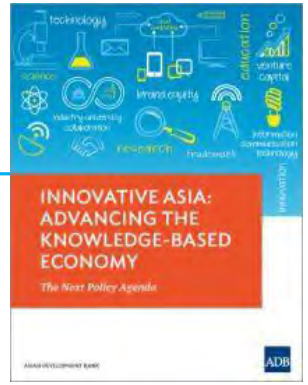
Source: OECD. 1996. The Knowledge Economy.

Success stories: Korea



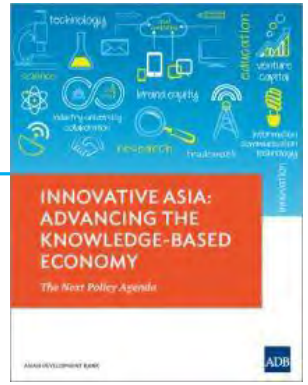
- R&D as % of GDP: from 0.5% in 1965 to 2.5% in 1997 to 3.7% in 2010.
  - Korea intends to increase this to 5.0% of GDP
- Super ministry combining science and technology and IT: Ministry of Science, ICT and Future Planning
- Government for R&D
  - Republic of Korea Advanced Institute of Science and Technology 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



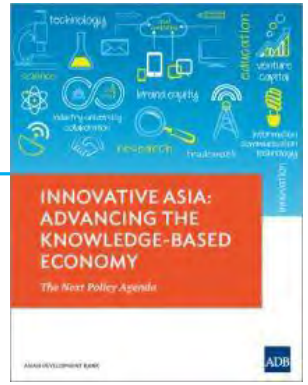
- From labor-intensive growth to skill-intensive growth to technology-intensive growth to knowledge and innovation economy-based growth
- R&D expenditure was 0.5% of GDP in the initial years and has steadily grown to 2.3% of GDP.
  - The country intends to increase it to 3.5% of GDP by 2015
- Role of 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

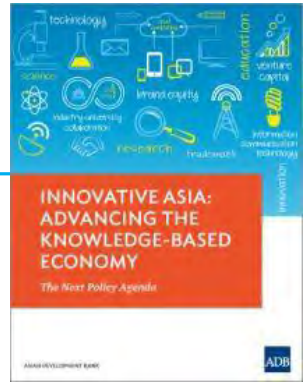


- 1950s: Finland was still an agriculture-based economy
- 1990s onward: firmly established as an innovation-based knowledge economy
- Broad-based and engaging approach to formulating the education, research, and innovation policy agenda
- R&D to reach 4% of GDP by 2015
- Support to the ICT sector used 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

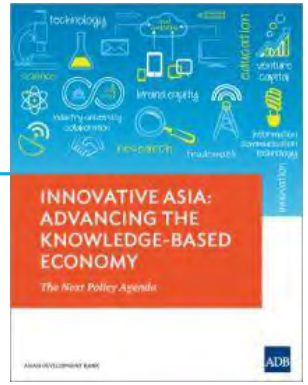


What can be done?

Education and skills

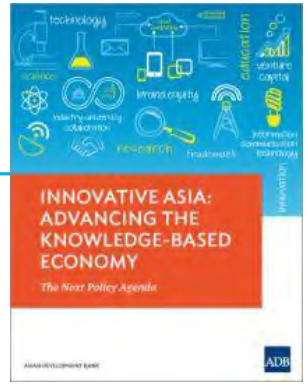
- Increasing education for employment and employability
  - Increase attainment levels and raise the quality of education
- Developing flexible systems of education, training and lifelong learning
  - Qualifications and competencies required in the marketplace
- Cater to tech or gray-collar workers
  - New knowledge workers as manufacturing and IT converge
- Expand PPP in education

Education and skills



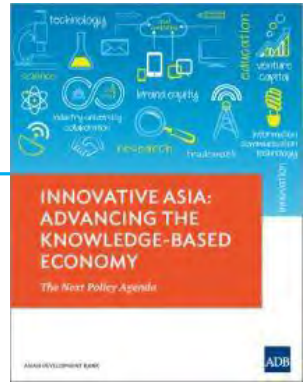
- Leveraging ICT to extend access and improve education quality
  - Web-based e-learning platforms
  - Massive open online courses (MOOCs)
- Expand centers of excellence in R&D
  - Incentivize industry giants to set up leading research labs
- Create a critical mass of world-standard tertiary education institutions

Innovation



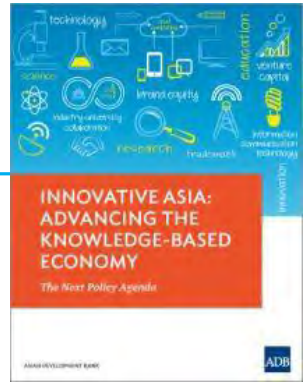
- Increase R&D expenditure to at least 1.5% of GDP
  - Except of PRC, none of emerging economies have R&D investment of 1.5%
  - Needed to advance beyond middle-income levels
- Promote high-impact R&D investments
  - PRC set to overtake the US as the world's largest R&D investor by 2020
  - but efficiency 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



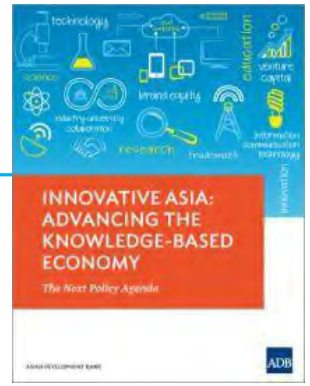
- Develop innovation intermediaries
  - Proof of concept labs, early stage financing, mentoring, business development support, market scoping, and testing
- Realize the potential of innovation in the services sector
  - Capitalize on offshoring opportunities
  - Invest in innovation capacity

Innovation



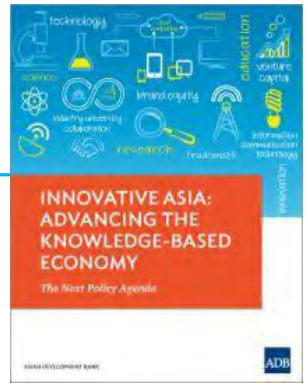
- Public sector funding to support commercialization of new technologies by local start ups
  - Examples: Small Business Innovation Research (SBIR) program in US and TEKES in Finland
- Strengthen and update intellectual property protection policies
- Create multiple innovation bases and hubs
  - Innovation districts that link technology, talent and finance
  - Co-located innovation clusters with industrial clusters and economic zones

Information and communication technology



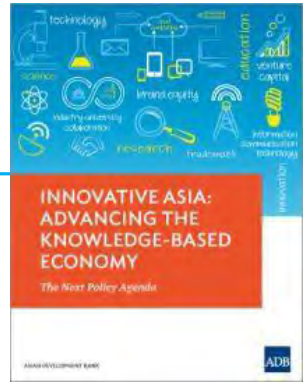
- Increase the penetration of ICT
  - a 10 percentage point increase in mobile phone penetration contributes to 4.2 percentage point increase in total factor productivity
- Tap the power of mobile phones for development
  - 3.5 billion mobile subscriptions in Asia; there are nearly 9 mobile phones for 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 communication technology



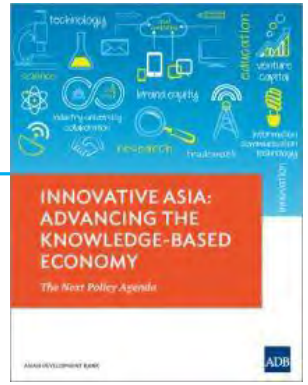
- Ensure universal, affordable and high-speed broadband
  - Need for comprehensive national broadband policies
- Expand digital literacy and talent for IT
- Adopt cloud based technology devices
  - Cloud computing will generate 10 million jobs in Asia by 2016 (14 million globally)
- Promoting e-government 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

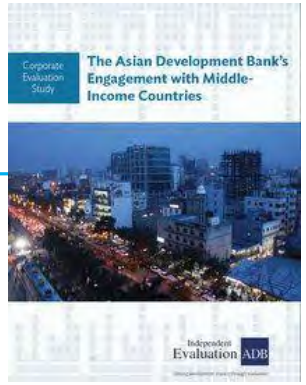
Economic incentive and institutional regime



- 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

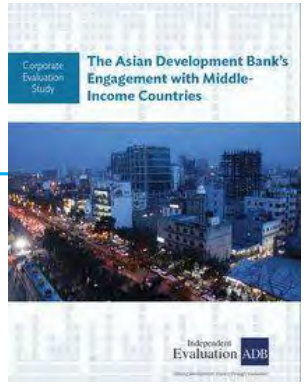
5. ADB Engagement with MICs

Strategic directions for ADB



1. Anchor finance on knowledge
2. Scale-up operations and target specific MIC needs
3. Decisively support private sector and PPP

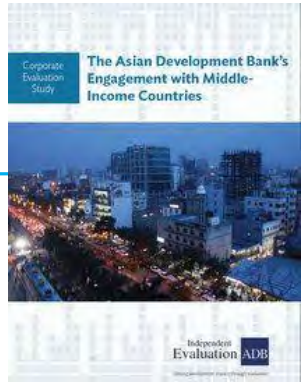
1. Anchor finance on knowledge



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. Scale up operations, target MIC needs

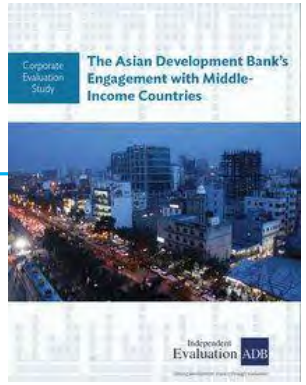


Urbanization	Environment and climate change	Productivity, competitiveness, innovation	Regional and global public goods	South-south cooperation

Governance

Innovation

3. Decisively support private sector, PPPs



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!