

Promoting Diversification: Evidence from Structural Transformation in Asia

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SPECIAL CHAPTER

Asia's Economic Transformation: Where to, How, and How Fast?



KEY INDICATORS
for Asia and the Pacific

2013

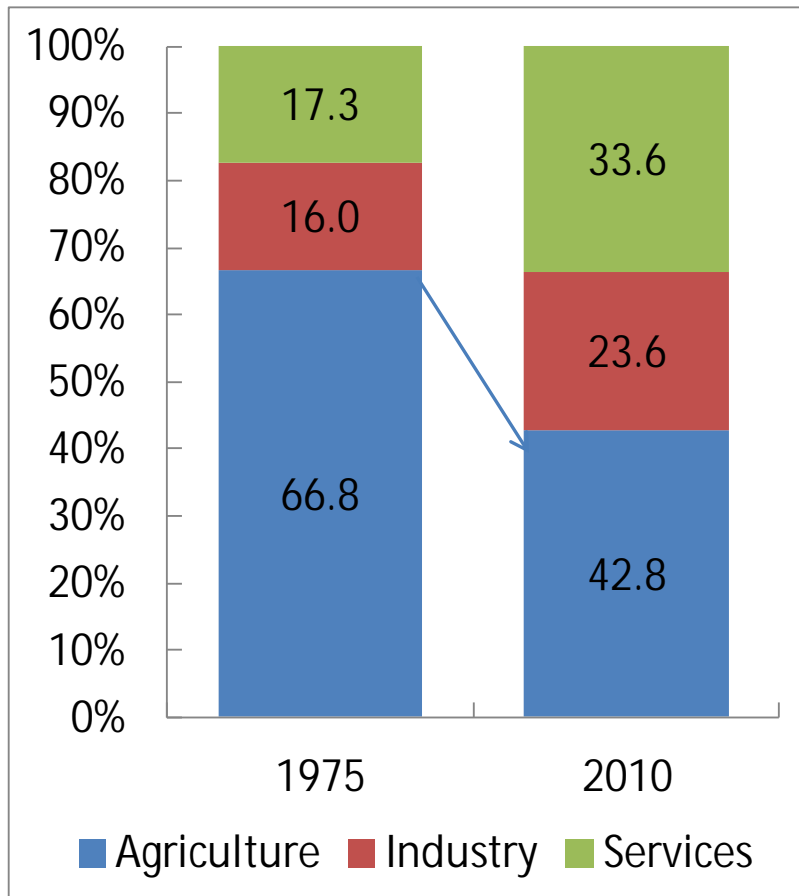
44th Edition

Key messages

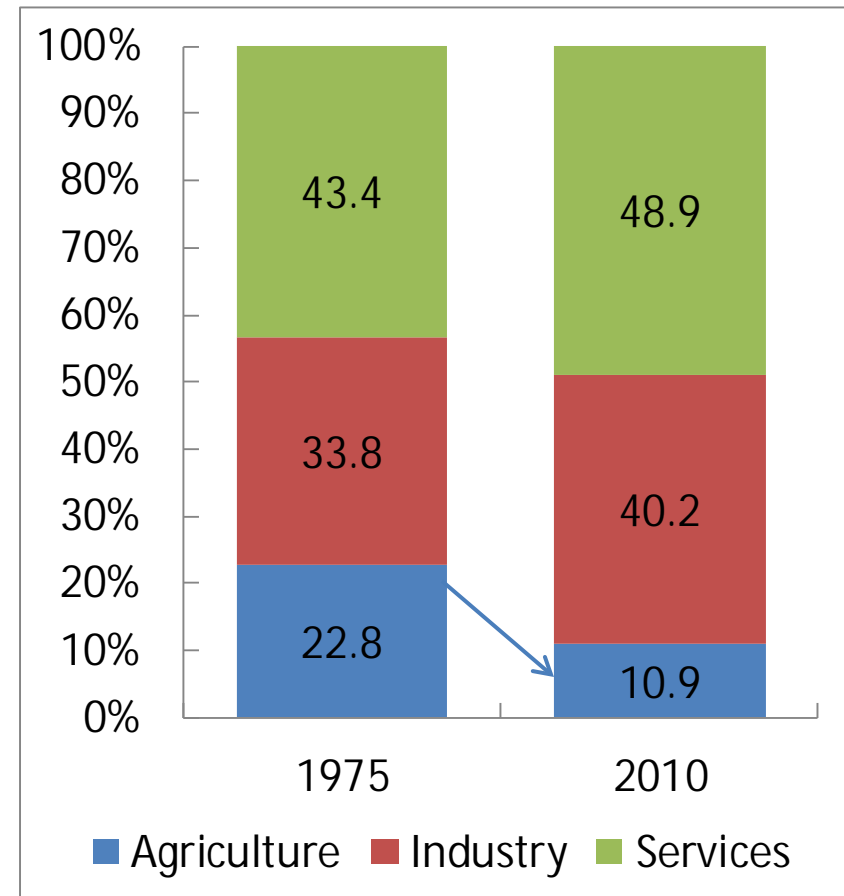
- Structural Transformation in Asia
 1. Agriculture is still the largest employer, with over 700 million workers, but it needs massive modernization
 2. Asia's transformation has been diverse, with varying degrees of industrialization
 3. To become a high-income economy, industrialization cannot be bypassed
 4. Good quality education is essential for industrial diversification
 5. Service sector will create more jobs, but industrialization is essential for a high quality service sector
- Implications for changing role of public and Private Sector

Developing Asia has undergone significant transformation...

Employment shares, Developing Asia
(% of total)

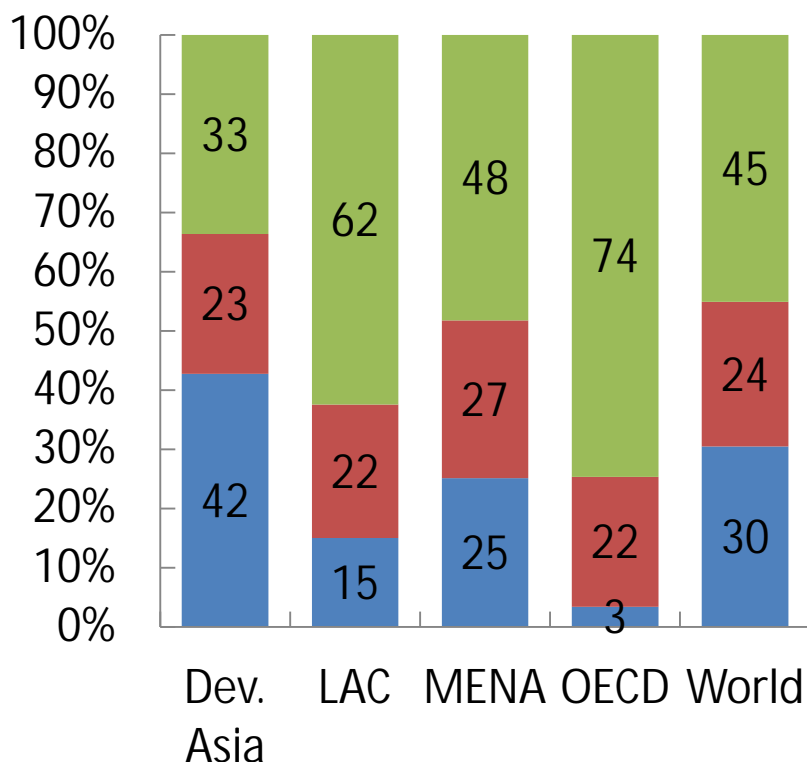


Output shares, Developing Asia
(% of GDP)

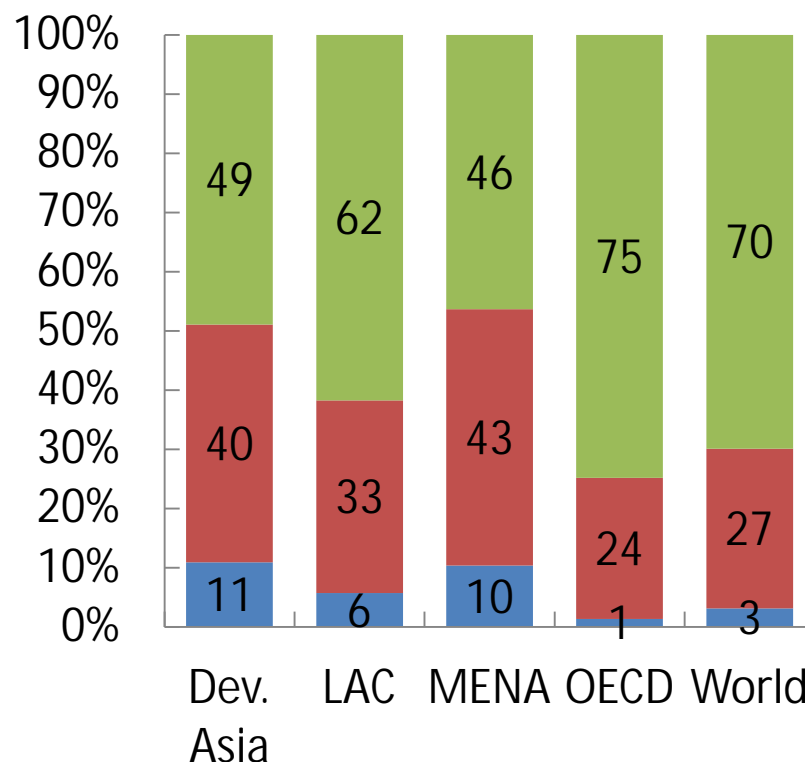


...but agriculture is still a larger employer than in other regions

Employment shares, 2010 or latest
(% of total)



Output shares, 2010 or latest
(% of total)



■ Agriculture ■ Industry ■ Services

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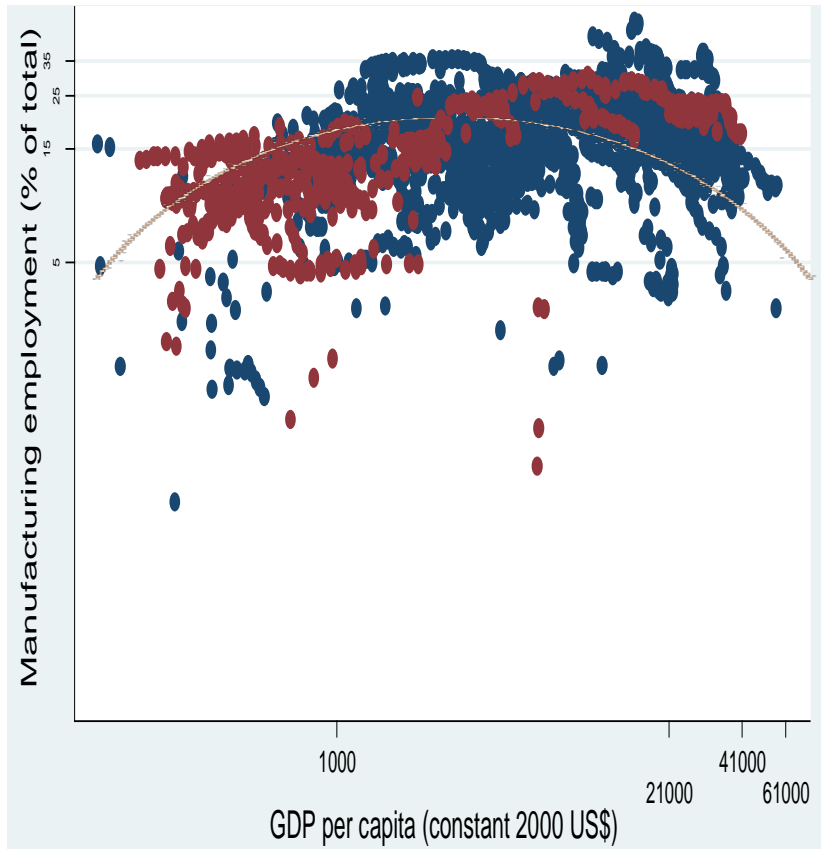
LAC=Latin America and the Caribbean; MENA=Middle East and North Africa; OECD=Organisation of Economic Co-operation and Development members

Progress on structural transformation has been uneven in Asia

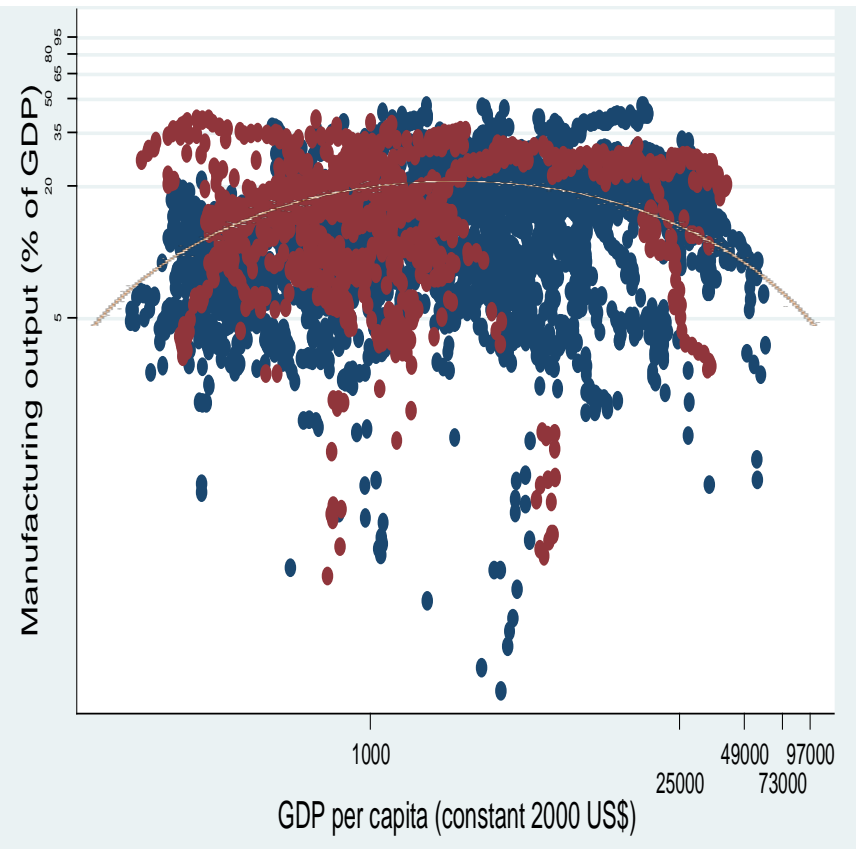
- Group 1: Economies that industrialized (and de-industrialized) and are high-income today
 - Japan; Hong Kong, China; the Rep. of Korea; Singapore; Taipei, China
- Group 2: Economies that have transformed significantly but have further to go
 - PRC, Malaysia, Thailand,
- Group 3: Economies that are still agricultural and/or have so far bypassed industrialization
 - India, Pakistan, the Philippines,

Industrialization: the 18% threshold in output and employment

Manufacturing employment shares



Manufacturing output shares



● Developing Asia ● Rest of the world

Income level and industrialization across the world (109 economies)

OUTPUT

| HIGH-INCOME COUNTRIES | | |
|----------------------------------|--|--|
| | INDUSTRIALIZED | DID NOT INDUSTRIALIZE |
| INDUSTRIALIZED | Austria; Australia; Belgium; Canada; Denmark; Finland; France; Germany; Hong Kong, China ; Ireland; Italy; Japan ; Rep. of Korea ; Netherlands; Norway; Puerto Rico; Singapore ; Spain; Sweden; Switzerland; Taipei, China ; United Kingdom; United States | Israel |
| DID NOT INDUSTRIALIZE | | United Arab Emirates |
| LOW- AND MIDDLE-INCOME COUNTRIES | | |
| INDUSTRIALIZED | Argentina, Belarus, Bolivia, Bulgaria, Colombia, Costa Rica, Croatia, Czech Republic, Dominican Republic, El Salvador, Guatemala, Hungary, Latvia, Lithuania, Macedonia, Malaysia , Mexico, Moldova, Morocco, New Zealand, Peru, Poland, Portugal, Romania, Serbia, Slovak Republic, Slovenia, Sri Lanka , Tunisia, Turkey, Ukraine, Uruguay | Greece, Iran, Paraguay, Russia |
| DID NOT INDUSTRIALIZE | Albania, Armenia , Azerbaijan , Brazil, Cambodia , Cameroon, Chile, People's Republic of China , Egypt, Honduras, Indonesia , Kyrgyz Republic , Lesotho, Mongolia , Nicaragua, Pakistan , Philippines , South Africa, Syria, Tajikistan , Thailand , Venezuela, Viet Nam , Yemen, Zambia | Algeria, Angola, Bangladesh , Botswana, Cuba, Ecuador, Ethiopia, Georgia , India , Iraq, Jamaica, Kazakhstan , Madagascar, Mali, Namibia, Nepal , Nigeria, Oman, Panama, Papua New Guinea , Saudi Arabia, Sierra Leone, Tanzania |

With a few exceptions, no economy has become high-income without industrializing

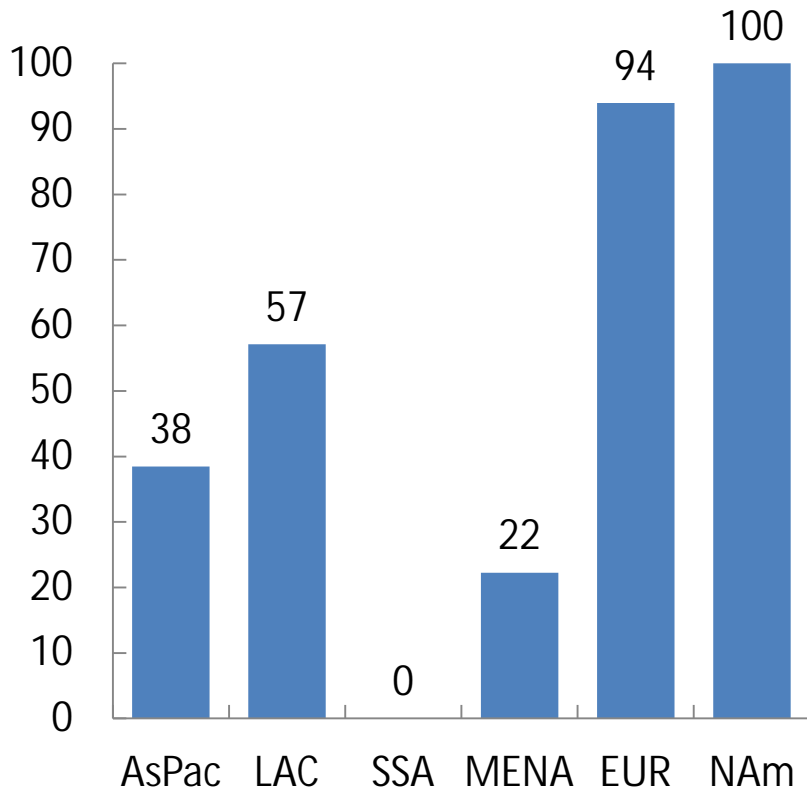
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Summary results

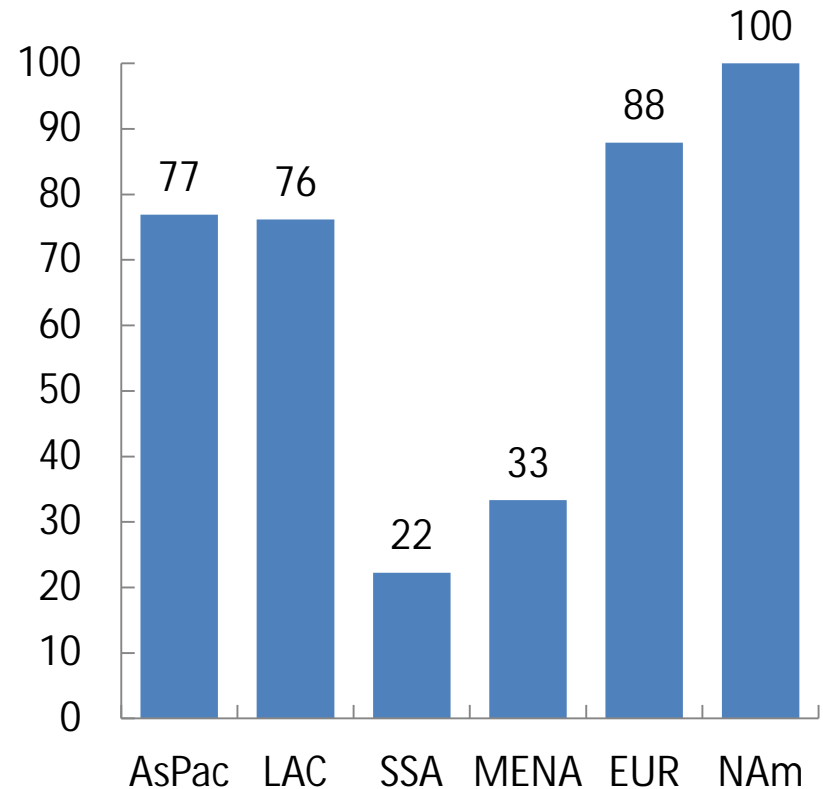
| | | Output industrialization | |
|------------------------------|-----|--|---------------------------|
| | | Yes | No |
| Employment industrialization | Yes | May become rich 42% probability | Null event |
| | No | Not likely to become rich <5% probability | Not likely to become rich |

Asia cannot be complacent. It needs to avoid falling into the middle income trap

Proportion of economies that have industrialized in employment



Proportion of economies that have industrialized in output



AsPac: Asia & Pacific; LAC=Latin America and Caribbean; SSA=Sub-Saharan Africa; MENA=Middle East & North Africa; EUR=Europe; NAM=North America

Sample sizes: AsPac=26; LAC=21; SSA=9; MENA=9; EUR=33; NAM=2

Asia's service sector will continue to grow

- Service sector is already the largest in output
 - Trend will continue
 - Many economies will attain shares similar to those in the OECD (about 75%)
- Service sector will also become the largest employer

➤ Key question: How to promote high value added service sector?

The Role of Education: Summary Results

- Primary education and the quality of education are statistically related to diversification
- Structural transformation is path-dependent
- But increasing the *quality* of education reduces the importance of path dependence
- *Teleportation* is practically impossible

Priorities for Asia's transformation

- Modernizing agricultural sector is a key task in Asia, in particular for low-income countries
- Middle-income countries need to further develop a deeper and broader industrial base
- Countries rich in natural resources must make efforts to diversify their economies
- For small island economies, industrialization may not be cost effective, and the future lies in becoming competitive in certain service sector niche markets

Implications for Timor-Leste

- Can Sovereign Wealth Fund replace Diversification?
 - No. Finite vs Infinite horizon (individual vs country)
- Can Natural resource rich countries diversify?
 - the Case of Brazil: Coffee
- What are the options for small countries?
 - Need to find niche markets for neighboring countries / utilize global value chains – focus on some segments of industrial value chain
- Why Private Sector Participation is important?
 - the Case of Algeria

Algeria's Failure to Diversify

- Algeria enjoyed an oil revenue bonanza in the 1970s, and massively invested in heavy manufacturing SOEs: rapid growth in the 70s
- Oil revenues declined in the mid-80s
- Failed to restructure SOEs & decline of the manufacturing sector
 - Manufacturing share: 12.6%(63-86) → 6.6%(00-05)
 - SOEs in manufacturing: 74.1%(63-86) → 65%(00-05)

Evolving capabilities of public and private sectors

| Stage of development | Industry Selection | Institutions |
|----------------------|---|---|
| Low income | Easy to select sectors Government has expertise Private sector weak | Weak financial sector Underdeveloped capital markets |
| Middle income | Harder to select as economy becomes more complex Knowledge shifting to private sector | Financial sector improving Non-bank finance expanding |
| Advanced income | Private sector highly developed, can select and assess projects Government role diminishes, more a guarantor | Deep financial markets Venture capital, with expertise |

Summing up: Where to, How, and How Fast?

- *Where to?*
 - Services already the largest sector in Asia's GDP
 - Over 700 million people employed in agriculture
 - Services will become the largest employer
 - Dilemma: But what type of services?
- *How?*
 - There is no one-size fits all package of policies and institutions to expedite transformation
 - Different Priorities: Modernizing agriculture, promoting industrialization, and removing institutional bottlenecks for service sector development
- *How Fast?*
 - It may be difficult for many countries to reproduce the experiences of the NIEs / depending on its linkages with global value chains

Thank you!

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