The Region: A Half-century of Stellar Growth
Average economic growth between 1961 and 2015

World economy +3.5% each year

Developing East Asia Pacific +7.2% each year

Source: Data from World Development Indicators (World Bank, various years). Author’s calculations.
Size of Economy at Various Growth Rates

Source: Data from World Development Indicators (World Bank, various years).

Note: Data cover the years 1960-2015. GDP = gross domestic product.

$11.1 trillion
EAP with China
Size of Economy at Various Growth Rates

Source: Data from World Development Indicators (World Bank, various years).
Note: Data cover the years 1960-2015. GDP = gross domestic product.
Size of Economy at Various Growth Rates

- **World**: $1.5 trillion
- **EAP without China**: $4.8 trillion

Source: Data from World Development Indicators (World Bank, various years).
Note: Data cover the years 1960-2015. GDP = gross domestic product.
Size of Economy at Various Growth Rates

Source: Data from World Development Indicators (World Bank, various years).

Note: Data cover the years 1960-2015. GDP = gross domestic product.
Share Working in Agriculture has Fallen

Share of population in 1991

- Agriculture
- Services
- Other

Source: Data from International Labor Organization. Author’s calculations.
Share Working in Agriculture has Fallen

Share of population in 2016

- Agriculture
- Services
- Other

Source: Data from International Labor Organization. Author's calculations.
Education Grew Rapidly and Steadily since 1950

Average years of schooling for adults aged 25+ in EAP compared to world average in 1950

- **World**: 1.3 years
- **EAP**: 2.9 years

Source: Barro and Lee 2013
Education Grew Rapidly and Steadily since 1950

Average years of schooling for adults aged 25+ in EAP compared to world average in 2010

- World
- EAP

7.9 years (EAP) vs. 8 years (World)

Source: Barro and Lee 2013
Every year of Schooling Raises Earnings by 9-10%

Source: Montenegro and Patrinos 2014
Race Between Education and Technology

Higher Education Enrollment Rate

Rate of Return to Higher Education

Source: Montenegro and Patrinos 2014
Educational Achievement

PISA 2015: Top 10 Performers (average scores in science, math reading)
East Asia Has Some of the Best Education Systems in the World

Note: Composite constructed average of PISA and TIMSS performance over all available iterations. Calculations based on PISA and TIMSS scores on nine assessments since 2000 for PISA, and 2003 for TIMSS.
More Learning Occurs in Above-Average Performing Systems

Source: PISA 2015 (OECD 2016)
Scores Are Not Only High, They Are Also Equitable

Average OECD score = 493

Students in bottom 40% of SES in Vietnam and BSJG score = 506

Source: PISA 2015 (OECD 2016)
Get the Basics Right

Percentage enrollment

- Elementary
- Lower secondary
- Upper secondary
- Tertiary

Source: Hong and Lee (2016).
Get the Basics Right

Fundamentals:
• Basic education first

Employer-led training:
• Training at secondary & post-secondary, based on skill needs, employer-led

Engage the private sector with public funding:
• Secondary education
• Higher education
Vietnam: Effect of Year of Schooling

Annual Productivity of Schooling (standard deviations)

Vietnam

Peru
Vietnam: PISA Outlier: Bucking the Income Trend
Rising Returns to Higher Education in Vietnam

![Graph showing the returns to education in Vietnam for Primary, Secondary, and Tertiary levels, comparing 1992 and 2010. The graph indicates a significant increase in returns for Tertiary education in 2010.]
There Are Rising Returns to Higher Levels of Education Despite Increases in Supply

Vietnam 1992

Share of workers with tertiary education

Wage premiums to tertiary education

Source: Di Gropello and Sakellariou 2010
There Are Rising Returns to Higher Levels of Education Despite Increases in Supply

Vietnam 2006

+94%

Share of workers with tertiary education

Wage premiums to tertiary education

+273%

Source: Di Gropello and Sakellariou 2010
Top Performing Systems have an Unshakeable Commitment to Developing Skills for Prosperity

Source: Barro and Lee 2013

Percent of population with no schooling in 1950

- Singapore: 68%
- Taiwan: 55%
- Hong Kong: 42%
- Korea: 35%
- Japan: 8%

Source: Barro and Lee 2013
Top Performing Systems have an Unshakeable Commitment to Developing Skills for Prosperity

Percent of population with no schooling in 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>18%</td>
</tr>
<tr>
<td>Taiwan</td>
<td>5%</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>8%</td>
</tr>
<tr>
<td>Korea</td>
<td>7%</td>
</tr>
<tr>
<td>Japan</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: Barro and Lee 2013
Since 1965: Japan Leads
Successful Systems Recruit and Develop Best to Be Teachers

In Japan, only 14% of applicants to education programs are accepted; only about 30–40% of graduates are hired annually.

In Singapore, the government recruits the top one-third of university graduates to become teachers.

In Korea, only 1 in 20 passes the exams for employment to become a teacher.

In Taiwan, China, typically only the top third of applications are accepted into education programs which are highly competitive.
Top Performers Use More Elaboration, Less Memorization

Teaching and learning strategies in mathematics around the world

Source: OECD 2016
Data from Assessments have Spurred National Reforms

EGRA zero-word readers, 2\textsuperscript{nd} grade

Indonesia
Tonga
Myanmar – Yangon
Cambodia
Vanuatu
Timor-Leste
Philippines - Cebuano

Source: Graham and Kelly 2017
Data from Assessments have Spurred National Reforms
EGRA zero-word readers, 2nd grade

2010

Cambodia: 48%

Source: Graham and Kelly 2017
Data from Assessments have Spurred National Reforms

EGRA zero-word readers, 2nd grade

Cambodia

Source: Graham and Kelly 2017
Ensure that Children are Ready to Learn in School

- Pregnancy
- Birth
- Family support
- Child health & development
- Preschool
Align institutions to ensure basic conditions for learning.

Concentrate effective, equity-minded public spending on basic education.

Select and support teachers throughout their careers to allow them to focus on the classroom.

Ensure that children are ready to learn in school.

Assess students to diagnose issues and inform instruction.
1. Align institutions to ensure basic conditions for learning
Concentrate effective, equity-minded public spending on basic
Select & support teachers to allow them to focus on classroom
Ensure that Children are Ready to Learn in School
Assess students to inform instruction
Thank you!

Harry Patrinos
@hpatrinos