

# **THE GREAT EAST ASIA – SOUTHEAST ASIA DIVERGENCE:**

**RICH ASIAN TIGERS      VS.      ASIAN KITTENS**



**STUCK IN A MIDDLE INCOME TRAP?**

**JAY K. ROSENGARD**

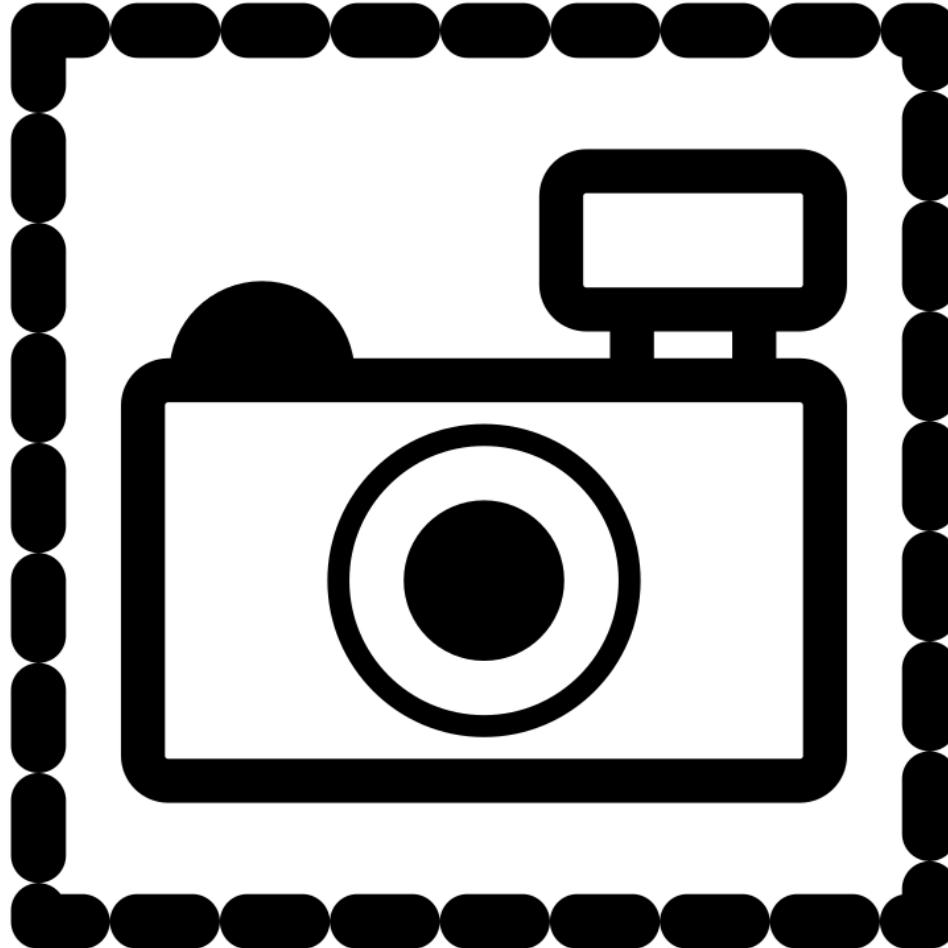
**KENNEDY SCHOOL OF GOVERNMENT**

**HARVARD UNIVERSITY**

# Roadmap of Presentation

- ASEAN snapshot
- Middle income trap
- Policy implications  
(with Indonesia case study)

# ASEAN Snapshot



# ASEAN Diversity

	<b>Year of entry into ASEAN</b>	<b>Population Million</b>	<b>GDP<sup>1</sup> \$ billion</b>	<b>GDP per capita<sup>1</sup> % of US level</b>	<b>Real growth of GDP, 2003–13 %</b>
Brunei	1984	0.4	17	78	1.1
Cambodia	1999	15.1	15.5	2	7.8
Indonesia	1967	249.9	868.3	7	5.8
Laos	1997	6.8	10.9	3	7.8
Malaysia	1967	29.7	312.4	20	5
Myanmar	1997	62.8	59	2	8.6
Philippines	1967	98.4	272	5	5.4
Singapore	1967	5.4	295.7	103	6.3
Thailand	1967	67	387.2	11	3.8
Vietnam	1995	91.7	171.2	4	6.4

<sup>1</sup> 2013, in current prices.

SOURCE: IHS; McKinsey Global Institute analysis

# ASEAN Economic Performance

## Exhibit E1

ASEAN has experienced rapid growth and relative stability since 2000

GDP 2013, current prices \$ trillion	Real GDP growth, 2000–13 %	GDP growth volatility, 2000–13 <sup>1</sup> %	Share of debt to GDP, 2013 %	Inflation rate, 2013 GDP deflator, %
United States 18.8	China 10.0	Russia 4.2	Japan 243.2	India 7.0
China 9.3	India 7.0	India 2.4	Italy 132.5	Russia 6.5
Japan 4.9	ASEAN 5.1	United Kingdom 2.8	United States 104.5	Brazil 6.5
Germany 3.8	Russia 4.4	Italy 2.3	France 93.9	ASEAN 2.8
France 2.7	Brazil 3.2	Germany 2.3	United Kingdom 90.1	Germany 2.3
United Kingdom 2.5	Canada 1.9	Japan 2.2	Canada 89.1	United Kingdom 2.1
ASEAN 2.4	United States 1.8	Brazil 2.2	Germany 78.1	China 1.7
Brazil 2.3	United Kingdom 1.5	China 1.8	India 68.7	United States 1.5
Russia 2.1	Germany 1.1	United States 1.7	Brazil 66.3	Canada 1.5
Italy 2.1	France 1.0	Canada 1.7	ASEAN 45.7	Italy 1.4
India 1.9	Japan 0.8	France 1.6	China 22.4	France 1.1
Canada 1.8	Italy 0.6	ASEAN 1.5	Russia 13.4	Japan -0.6

1. Standard deviation of GDP growth rate.

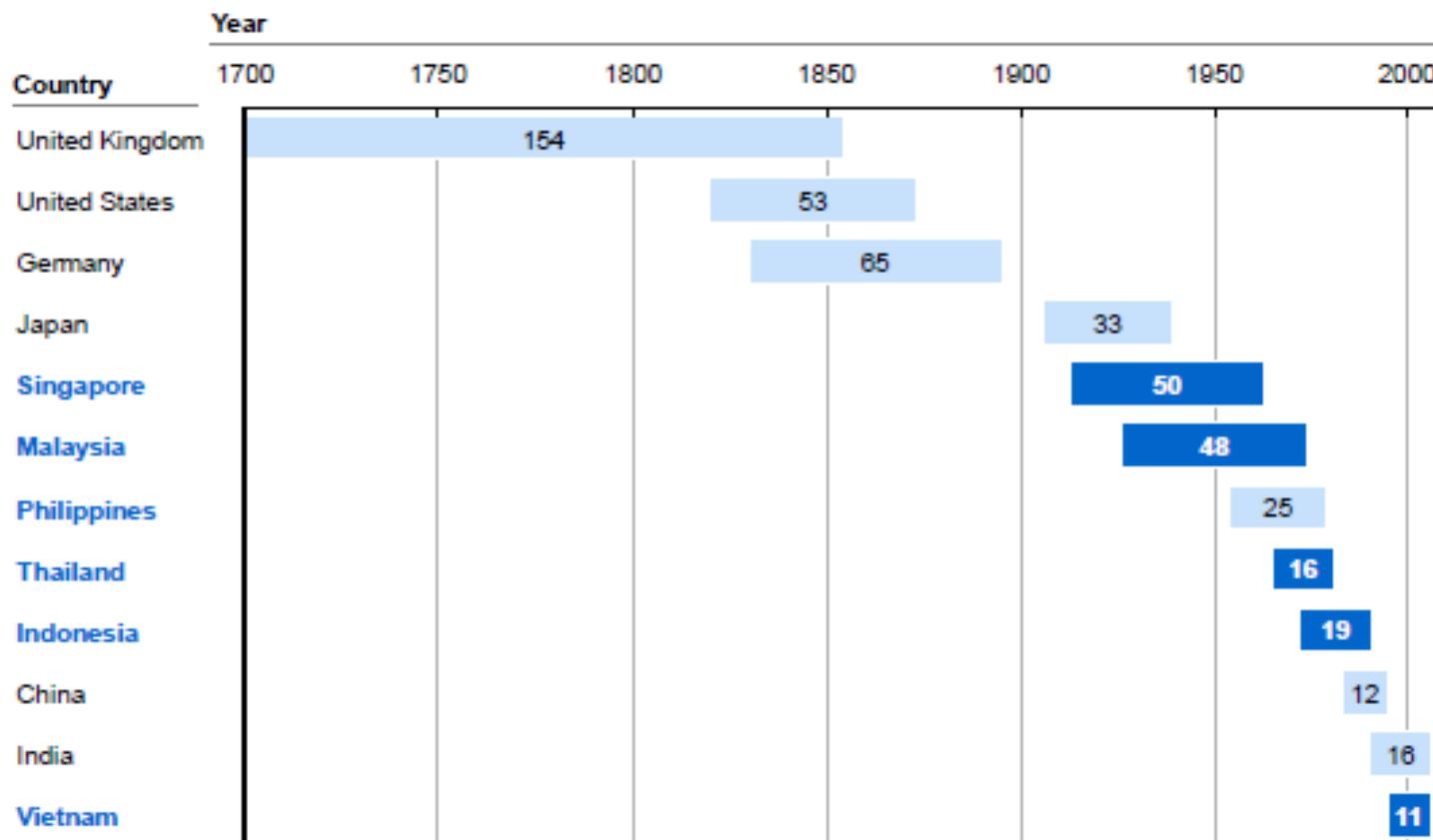
SOURCE: IHS; World economic outlook; International Monetary Fund, April 2014; McKinsey Global Institute analysis

# ASEAN Income Growth

## Exhibit 2

Incomes in ASEAN countries are rising at unprecedented rates

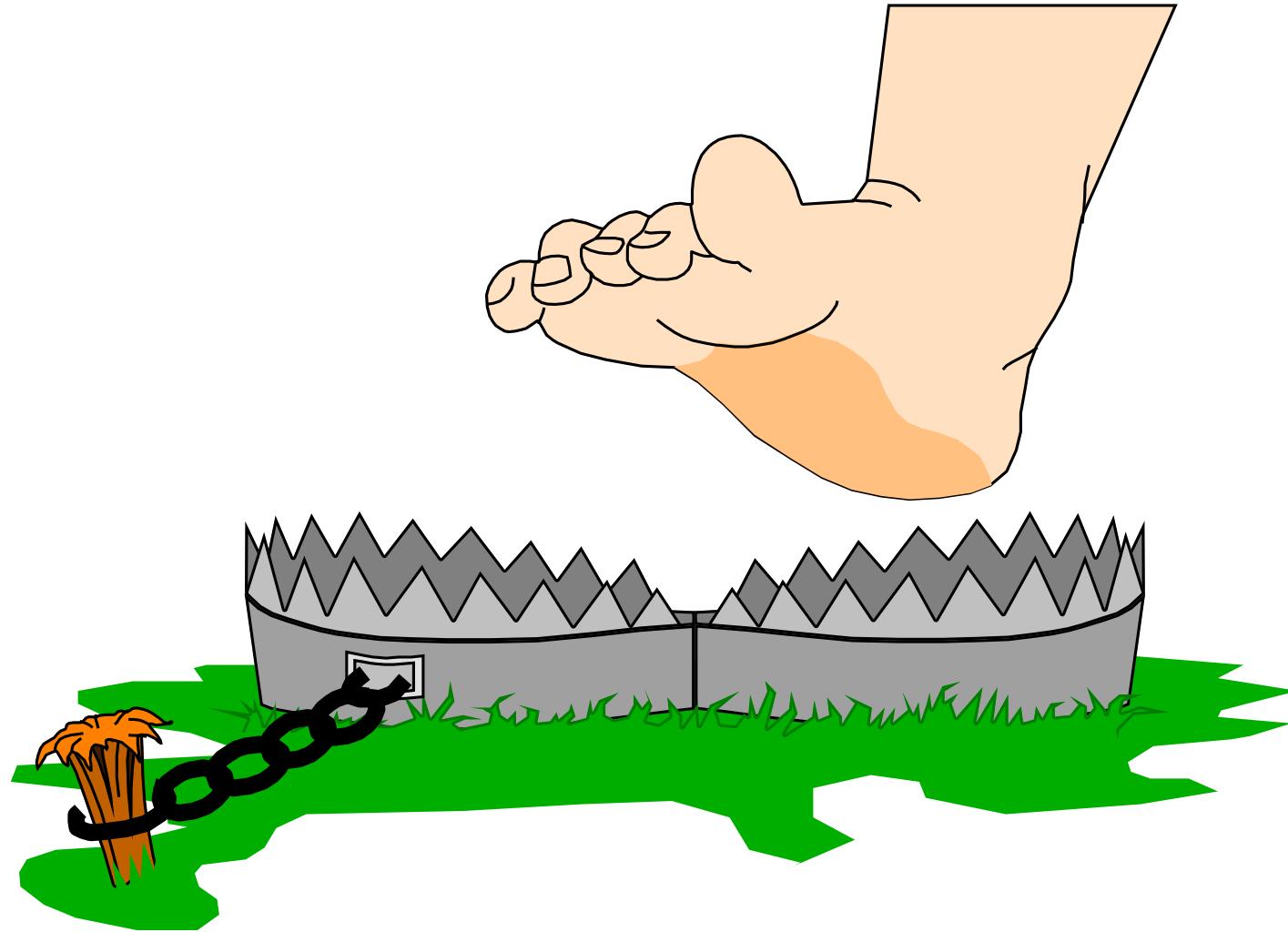
Years to double per capita GDP<sup>1</sup>



1. Time to increase per capita GDP (in PPP terms) from \$1,300 to \$2,600.

SOURCE: Angus Maddison, *Historical statistics of the world economy: 1–2008 AD*; McKinsey Global Institute analysis

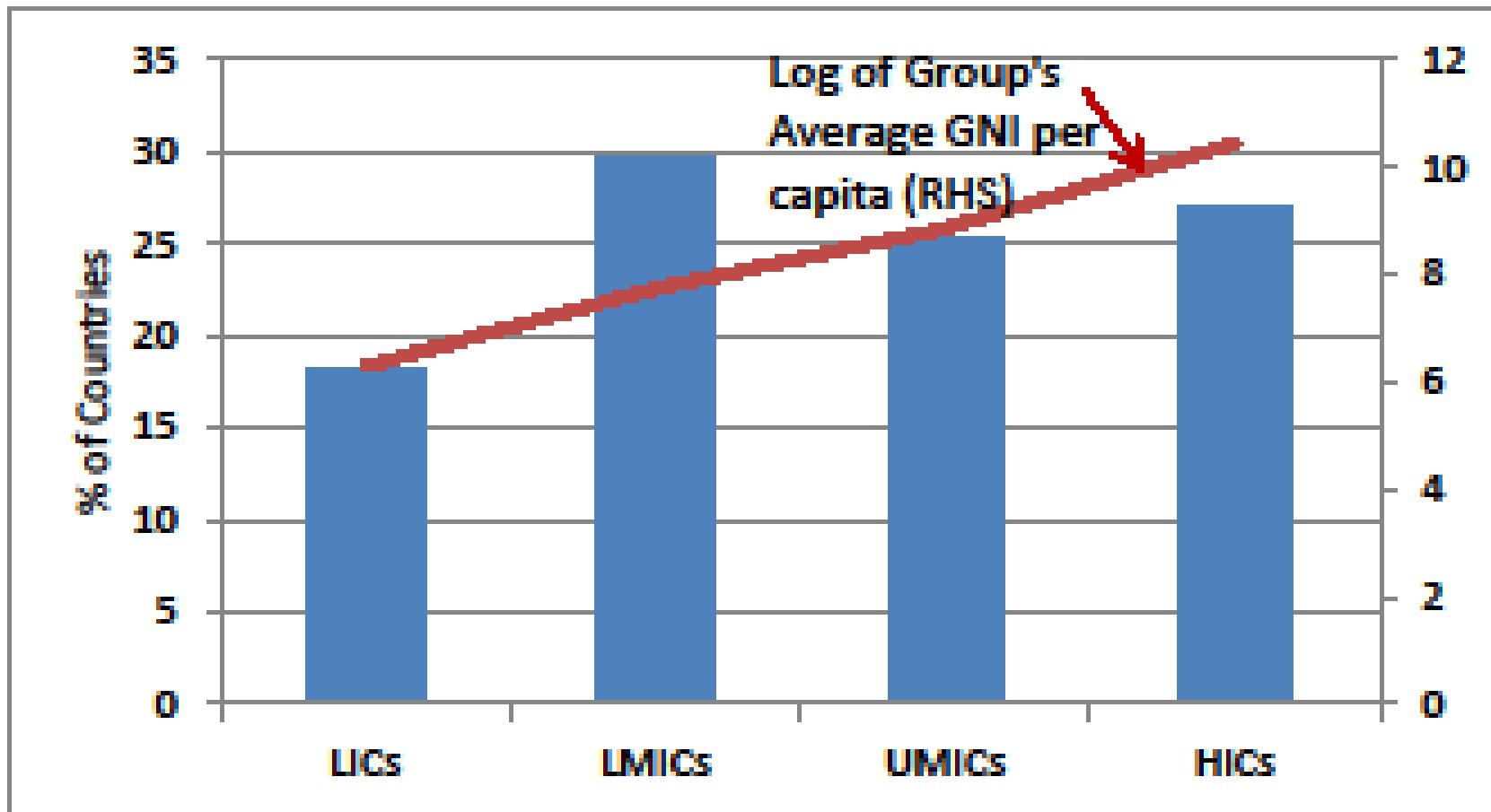
# Middle Income Trap



# What is Middle Income?

- Based on estimates of gross national income (GNI) per capita using the World Bank Atlas Method
- Latest classifications as of 1 July 2015 (2014 data):
  - Low income:  $\leq \$1,045$   
→ Cambodia
  - Lower middle income:  $> \$1,045$  but  $\leq \$4,125$   
→ Myanmar, Lao PDR, **Vietnam, Philippines, Indonesia**
  - Upper middle income:  $> \$4,125$  but  $\leq \$12,735$   
→ **Thailand, Malaysia**
  - High income:  $> \$12,735$   
→ Brunei Darussalam, Singapore

# Distribution of Countries (GNI/Capita, 2010)



Source: World Development Indicators.

# What is a Middle Income Trap?

- Income convergence vs. absolute income level
  - Relative catch-up with high income countries?
  - Unconditional convergence?
  - Determination of income thresholds?
- Income vs. non-income proxies for development
  - Metrics for income measurement?
  - Definition of development?
  - Correlation between income and non-income indicators?

# Relative Convergence

**Table 1: Number of Years for Convergence to Rich Countries GDP per capita, as a function of MIC Growth rate and Initial per capita GDP Ratio (HIC threshold/country's level)**

		$(g_H = 1.8\%)$								
		$g_M$								
		2%	3%	4%	5%	6%	7%	8%	9%	10%
25		1640	275	151	104	80	65	54	47	42
20		1526	256	140	97	74	60	51	44	39
15		1380	231	127	87	67	54	46	40	35
10		1173	196	108	74	57	46	39	34	30
5		820	137	75	52	40	32	27	24	21
4		706	118	65	45	34	28	23	20	18
3		560	94	51	35	27	22	19	16	14
2		353	59	32	22	17	14	12	10	9
1.5		207	35	19	13	10	8	7	6	5

Source: Authors' calculations based on Equation (1).

Notes: Assuming 1.8 percent growth in real GDP per capita in the rich country reference.  $R$  is the ratio of rich country GDP per capita to MIC GDP per capita. The  $g_M$  is the rate of growth of GDP per capita in the MIC.

Dividing line is to show minimum growth rates to converge to future rich country reference level in under 50 years.

# Absolute Convergence (1)

**Table 3: Years towards reaching *absolute* high-income status, as a function of initial GDP per capita and MIC growth rate (per capita)**

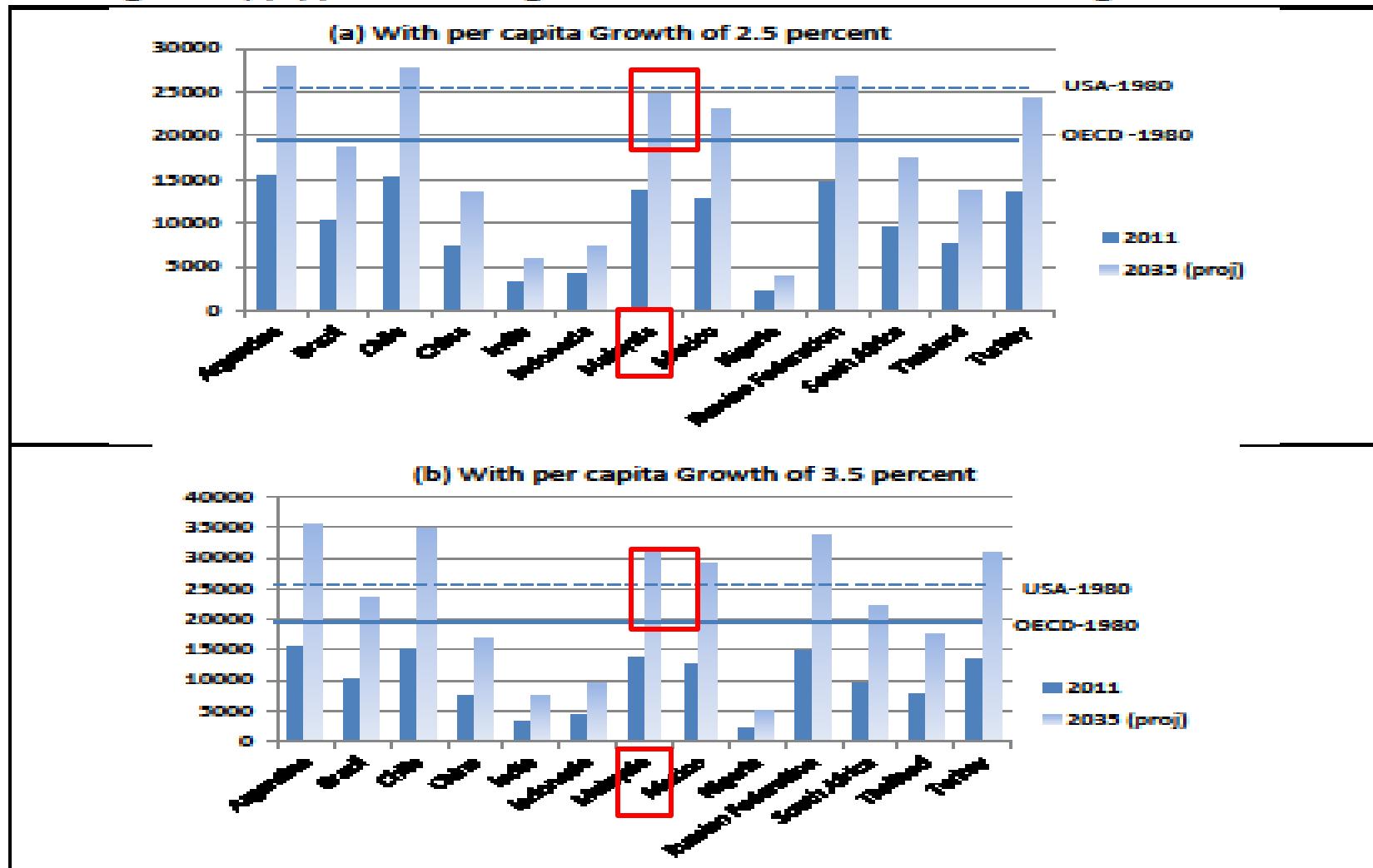
<i>R</i>	<i>g<sub>M</sub></i>								
	1%	2%	3%	4%	5%	6%	7%	8%	9%
25	323	163	109	82	66	55	48	42	37
20	301	151	101	76	61	51	44	39	35
15	272	137	92	69	56	46	40	35	31
10	231	116	78	59	47	40	34	30	27
5	162	81	54	41	33	28	24	21	19
4	139	70	47	35	28	24	20	18	16
3	110	55	37	28	23	19	16	14	13
2	70	35	23	18	14	12	10	9	8
1.5	41	20	14	10	8	7	6	5	5

Source: Authors' calculations. Bold italics are added to note that Upper MICs have a ratio R that is about 3 or less – if using World Bank definitions for these thresholds.

Note: The dividing line shows minimum growth rates to reach current HIC threshold in under 50 years.

# Absolute Convergence (2)

Figures 3(a)-(c): HICs in a generation with sustained moderate growth?



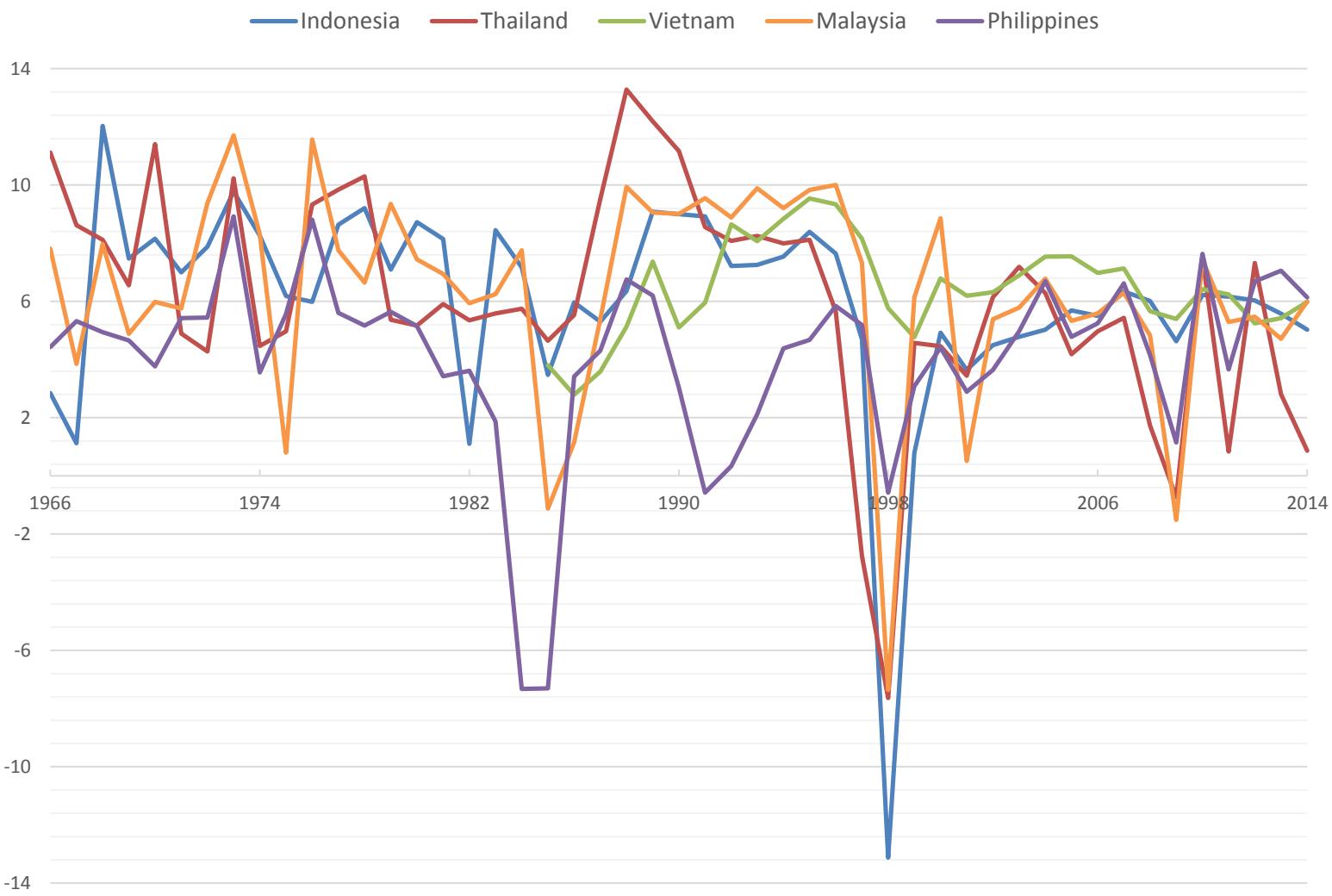
# East Asian Tigers MIC to HIC Transition

**Table 9: Time required to cross the lower and upper threshold of upper-middle countries**

Country	Year for lower boundary of UMIC	GDP to US GDP - Lower threshold	Year for upper boundary of UMIC	GDP to US GDP - Upper threshold	Number of years	Average growth differential for 1950-2000	Average growth differential for the transition period from MIC to HIC status	Average growth differential until reaching the upper UMIC threshold
<b>Countries that have crossed both lower and upper thresholds of the UMIC: 0.45 and 0.60 of US GDP per capita between 1950 and 2000</b>								
Austria	1955	0.45	1969	0.60	14	0.012	0.022	0.024
Finland	1951	0.45	1970	0.64	19	0.010	0.019	0.019
Germany	1953	0.45	1958	0.63	5	0.009	0.062	0.058
Hong Kong	1976	0.47	1992	0.62	6	0.027	0.055	0.032
Italy	1957	0.47	1990	0.61	11	0.010	0.028	0.030
Ireland	1980	0.45	1996	0.61	16	0.015	0.030	0.012
Japan	1964	0.45	1970	0.63	4	0.023	0.080	0.031
Singapore	1980	0.49	1990	0.61	10	0.025	0.030	0.026
South Korea	1994	0.45	2007	0.61	13	0.036	0.026	0.036
Spain	1973	0.45	2006	0.61	33	0.018	0.009	0.018
Taiwan	1991	0.45	2004	0.61	13	0.035	0.037	0.036
<b>Mean</b>				0.61	13.1	0.020	0.034	0.032
<b>Countries that have crossed both lower and upper thresholds of the UMIC: 0.25 and 0.50 of US GDP per capita between 1950 and 2000</b>								
Greece	1957	0.26	2007	0.51	50	0.017	0.015	0.017
Hong Kong	1956	0.25	1978	0.50	22	0.027	0.034	0.029
Japan	1955	0.25	1968	0.54	13	0.020	0.058	0.057
Singapore	1969	0.26	1981	0.50	12	0.025	0.030	0.026
South Korea	1983	0.26	1997	0.50	14	0.036	0.049	0.039
Spain	1954	0.26	1975	0.51	21	0.018	0.036	0.034
Taiwan	1978	0.26	1993	0.51	15	0.035	0.048	0.040
<b>Mean</b>				0.51	21.0	0.025	0.043	0.035

Source: Fernando Gabriel Im and David Rosenblatt, *Middle-Income Traps: A Conceptual and Empirical Survey*, Policy Research Paper Working Paper 6594 (Washington, D.C.: World Bank, September 2013).

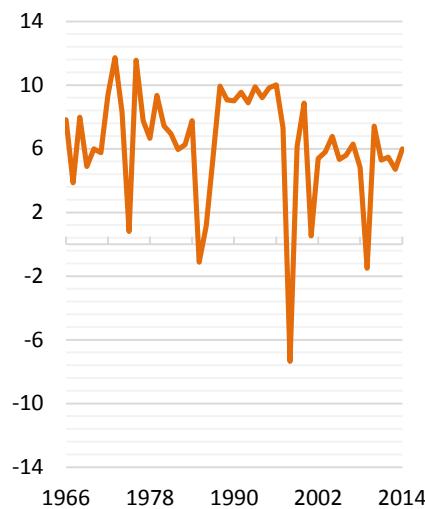
# Economic Growth for Middle-Income ASEAN Nations (1)



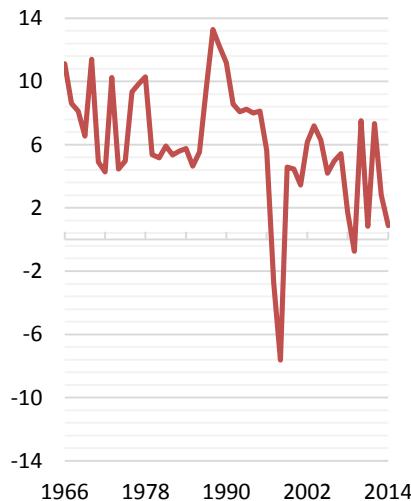
Sources: World Bank National Accounts Data and OECD National Accounts Data Files.

# Economic Growth for Middle-Income ASEAN Nations (2)

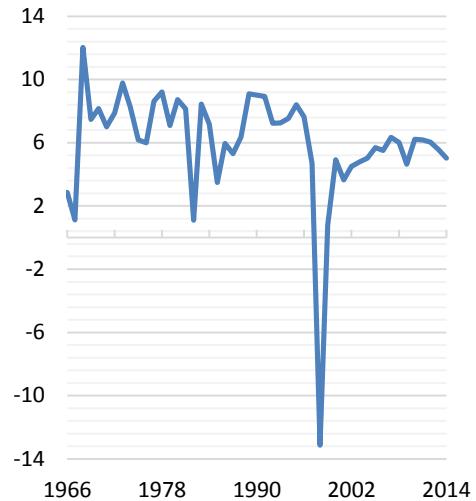
Malaysia



Thailand



Indonesia



Vietnam



Philippines



Sources: World Bank National Accounts Data and  
OECD National Accounts Data Files. 16

# Growth Rates of GDP (%)

Country	Average Annual Growth Rate (%)				
	'66 - '75	'76 - '85	'86 - '95	'96 - '05	'06 - '14*
Singapore	11.2	7.8	8.7	5.3	5.7
Hong Kong SAR, China	6.0	8.7	6.6	3.5	3.6
Korea, Rep.	10.6	8.7	9.2	5.1	3.7
Taiwan	10.1	9.2	8.4	5.0	3.8
Malaysia	6.6	6.9	8.2	4.9	4.9
Thailand	7.5	6.7	9.3	3.2	3.4
Indonesia	7.1	6.8	7.5	2.9	5.7
Philippines	5.2	2.5	3.5	4.1	5.4
Vietnam	n.a.	n.a.	6.5	6.9	6.1

Notes:

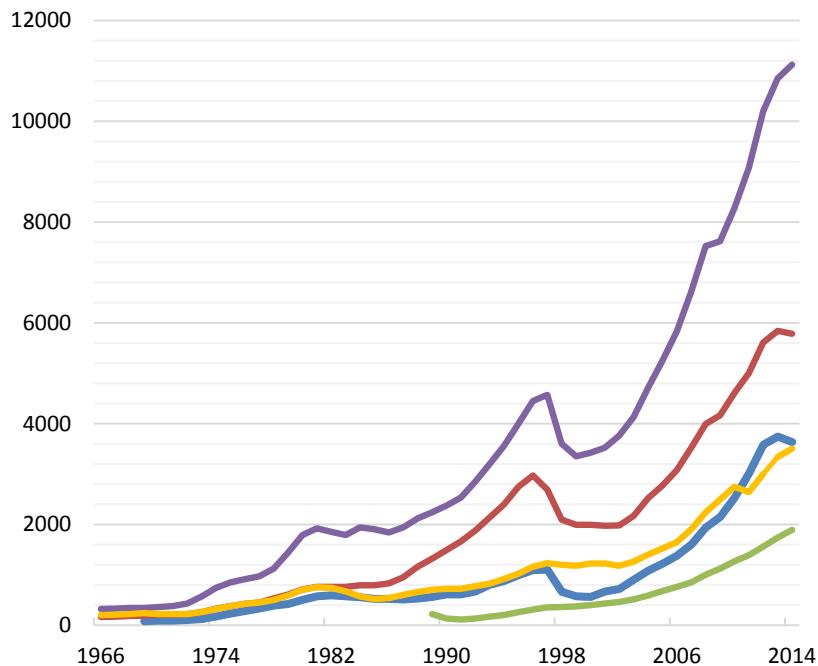
\*Average growth rate in 9 years.

Source: World Development Indicators (World Bank National Accounts Data, and OECD National Accounts Data Files); National Statistics, Republic of China (Taiwan).

# Gross National Income (GNI) per Capita

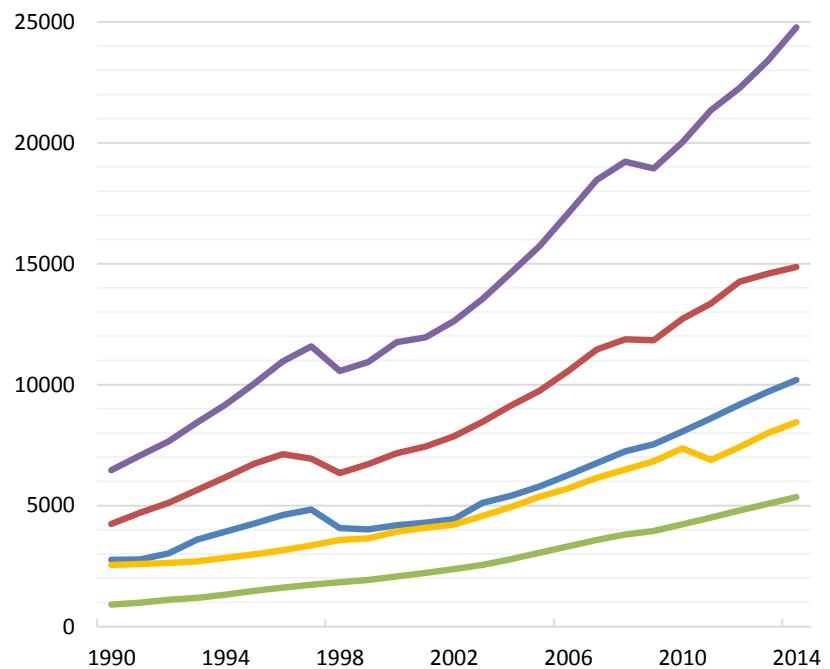
Atlas Method (current US\$)

Indonesia   Thailand   Vietnam  
Malaysia   Philippines



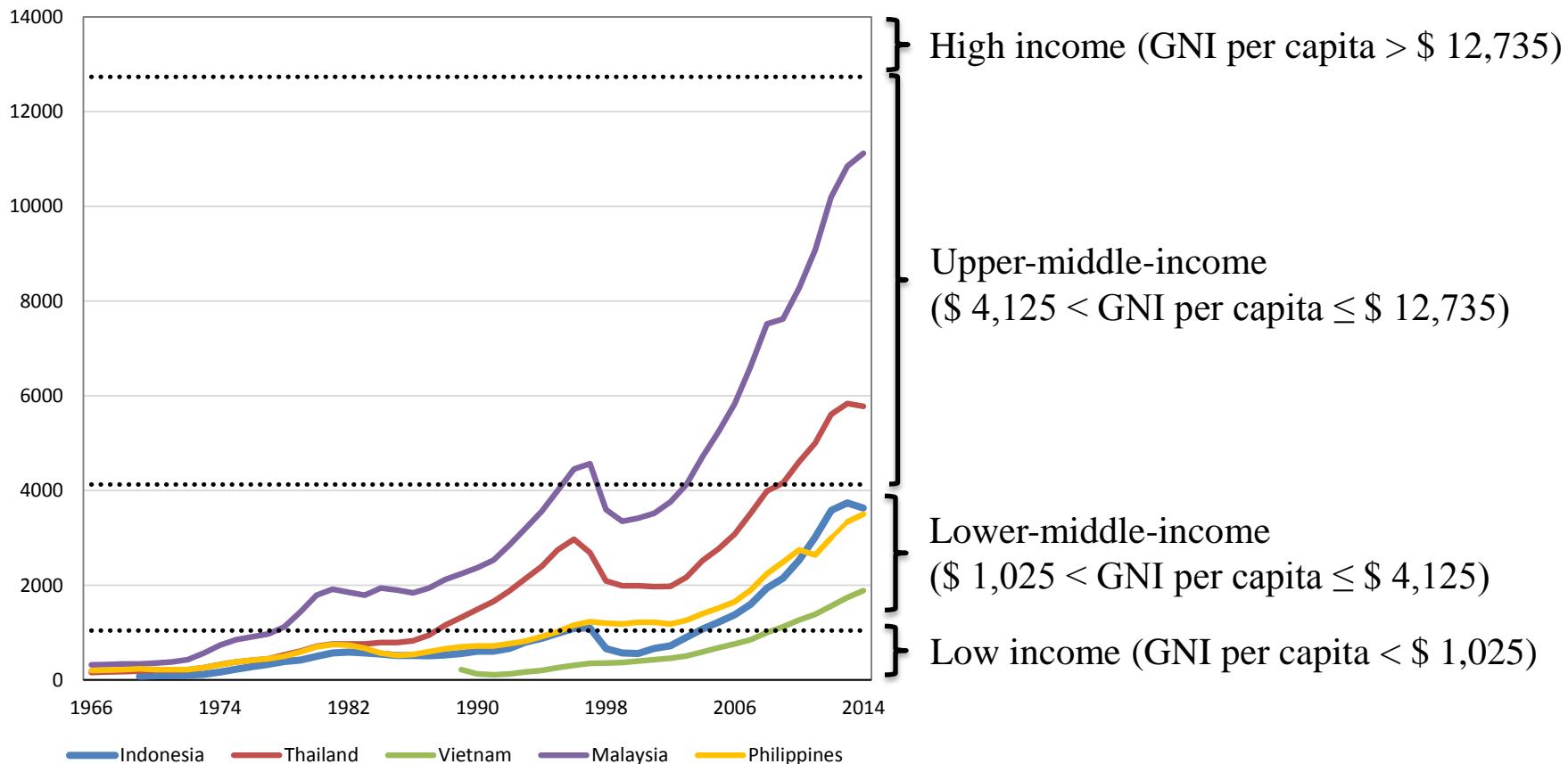
PPP(current international \$)

Indonesia   Thailand   Vietnam  
Malaysia   Philippines



# Gross National Income (GNI) per Capita

Atlas Method (current US\$)



Source:

World Development Indicators (World Bank National Accounts Data and OECD National Accounts Data Files);  
As of 1 July 2015, classification of the world's economies based on estimates of GNI per capita.

	Growth Rates of GDP Per Capita (%)					
	1961- 1970	1971- 1980	1981- 1990	1991- 2000	2001- 2010	2010- 2014
China	1.0	4.3	7.7	9.3	9.8	6.8
Hong Kong	7.7	6.9	5.4	2.3	3.5	1.7
Taiwan	7.0	7.9	6.4	5.7	2.3	4.2
Japan	9.8	3.3	4.0	0.9	0.8	0.1
Republic of Korea	5.7	5.4	7.5	5.1	3.7	2.9
Indonesia	1.8	5.4	4.4	2.7	4.0	3.8
Vietnam	na	na	na	5.9	5.9	4.8
Philippines	1.8	3.1	-0.9	0.8	2.8	4.3
Thailand	5.1	4.3	5.9	3.5	3.4	0.4
Malaysia	3.4	5.3	3.1	4.4	2.7	4.4
Cambodia	na	na	na	na	6.1	5.1
Singapore	4.4	7.2	4.9	4.6	3.4	1.6

Source: Presentation by Prof. Dwight Perkins, HKS Conference “Understanding Indonesia” (21 November 2015)

# Non-Income Development Indicators: Upper MICs

	Upper MIC (2009)	Lower MIC (2009)	US in 1920	US in 1960	US in 2010
Access to electricity (% of population)	97.3	67.7			
Life expectancy at birth, total (years)	72.4	65.2	54.1	67.4	78.2
Mortality rate, infant (per 1,000 live births)	19.3	50.7	85.8	26	6.5
School enrollment, secondary (% gross)	84.4	59.0	64.3**	84.4**	96.0
School enrollment, secondary (% net)	75.9	52.4*			89.5
Physicians (per 1,000 people)	1.7	0.8	1.37	1.48	2.4
Improved water source (% of population with access)	91.9	86.5			
Literacy Rate (percent)	93.5	70.9	94	97.8****	

Sources: World Development Indicators and Bureau of the Census (1975)

Notes: \*Data for 2008 instead of 2009

\*\*Slightly different definition: primary and secondary, % of population 5 to 20 years of age

\*\*\*\*1959 instead of 1960.

Source: Fernando Gabriel Im and David Rosenblatt, *Middle-Income Traps: A Conceptual and Empirical Survey*, Policy Research Paper Working Paper 6594 (Washington, D.C.: World Bank, September 2013).

# Non-Income Development Indicators: ASEAN MICs

Indicators	Year of 2014					US in 1960	US in 2014
	Malaysia	Thailand	Indonesia	Vietnam	Philippines		
Life expectancy at birth, total (years)	74.7	74.4	68.9	75.6	68.3	67.4	78.9
Mortality rate, infant (per 1,000 live births)	6.2	10.9	23.6	17.8	22.8	26.0	5.7
School enrollment, secondary (% gross) <sup>a</sup>	71.1	86.2	82.5	n.a.	88.4	84.4 <sup>b</sup>	95.9
Physicians (per 1,000 people) <sup>c</sup>	1.2	0.4	0.1	1.1	1.2 <sup>d</sup>	1.5	2.4
Literacy rate, adult total (% of people ages 15 and above) <sup>e</sup>	94.6	96.7	93.9	94.5	96.3	97.8 <sup>f</sup>	n.a.

Sources: World Development Indicators, Bureau of the Census (1975), and UIS.STAT (UNESCO Institute for Statistics)

Notes:

<sup>a</sup>2013

<sup>b</sup>Slightly different definition: primary and secondary, % of population 5 to 20 years of age

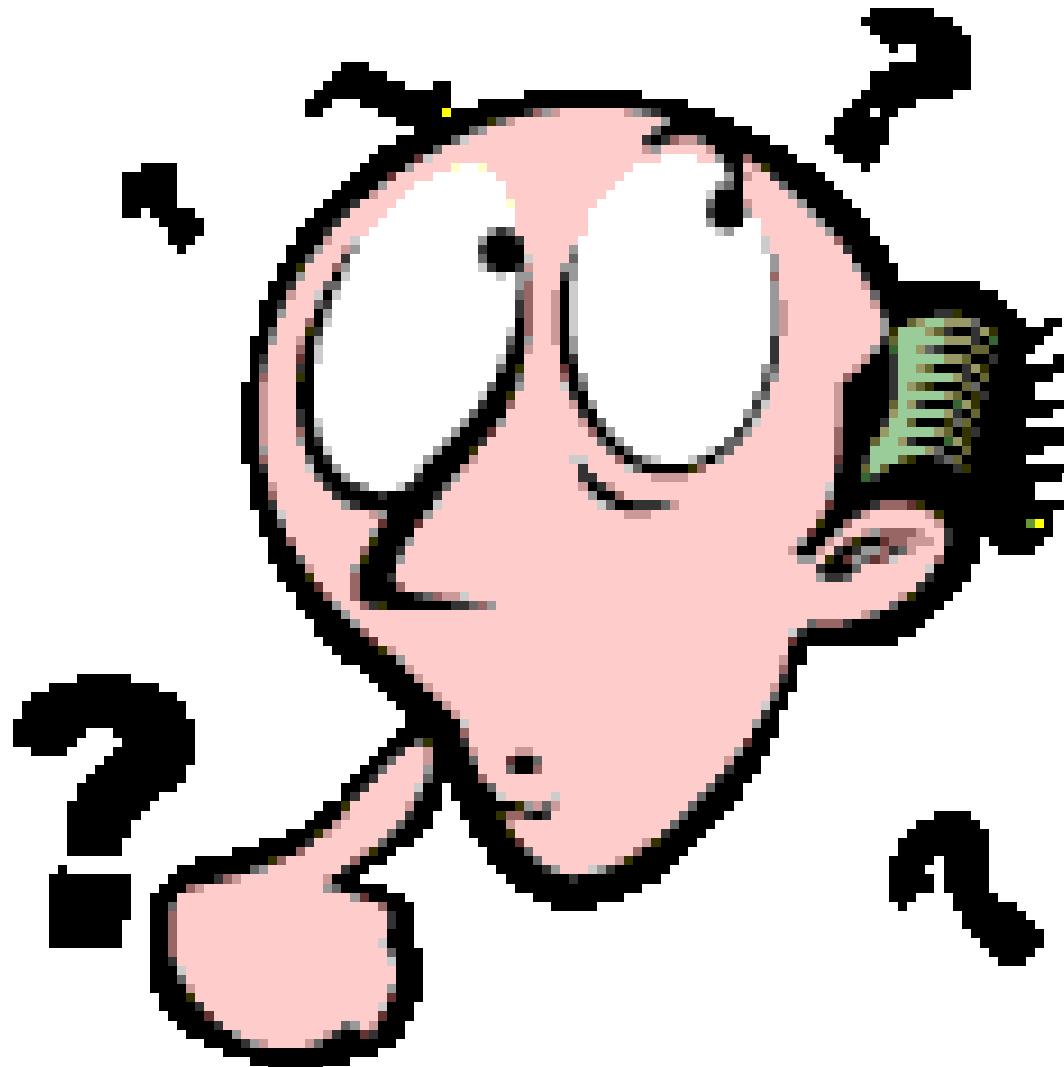
<sup>c</sup>2010

<sup>d</sup>2004

<sup>e</sup>2015

<sup>f</sup>1959 instead of 1960

# Policy Implications



# Are ASEAN MICs Caught in a Middle Income Trap?

- *No evidence ASEAN MICs on a pre-determined lower development path or caught in a middle income trap*
- *Nonetheless, regardless of the metric used, economic performance is not fulfilling expectations*
- Economic growth slower than potential, more volatile and vulnerable than in the past, not sustainable in the future
- *Appears to be the result of poor policy design & execution*
- Disturbing political and social consequences
- Key concerns are: significant underinvestment in hard infrastructure; weak government and governance; neglected human resource development

# ASEAN Infrastructure Stock

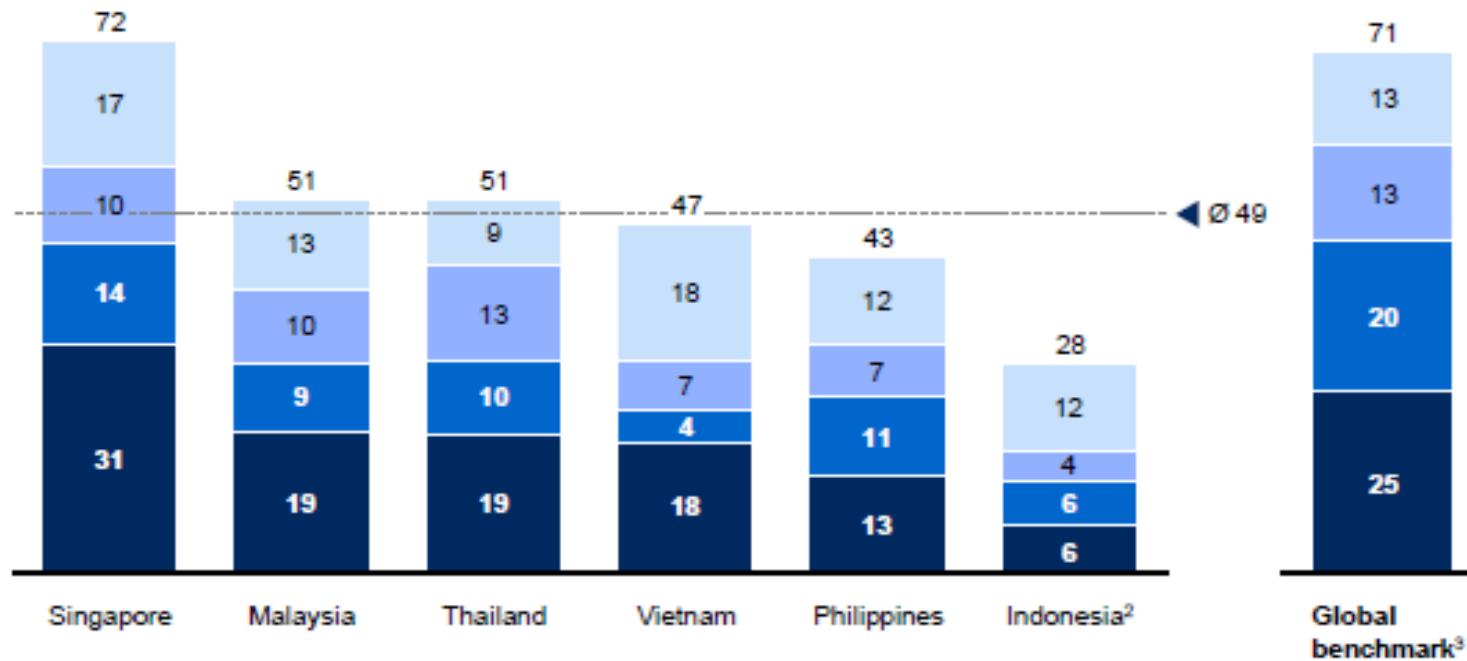
## Exhibit 34

Most ASEAN countries have infrastructure stock that is below the global average

Infrastructure stock<sup>1</sup>

% of GDP, 2012

Water  
Telecom  
Power  
Transport



1 Estimated based on historical expenditure and using the perpetual inventory method.

2 Transport infrastructure stock for Indonesia is understated, as expenditure for rail, ports, and airports is not available.

3 Based on a study of Canada, China, Germany, India, Italy, Poland, South Africa, Spain, United Kingdom, and United States.

SOURCE: International Transport Forum; Global Water Intelligence; IHS; Perpetual inventory method, OECD, 1998; McKinsey Global Institute analysis

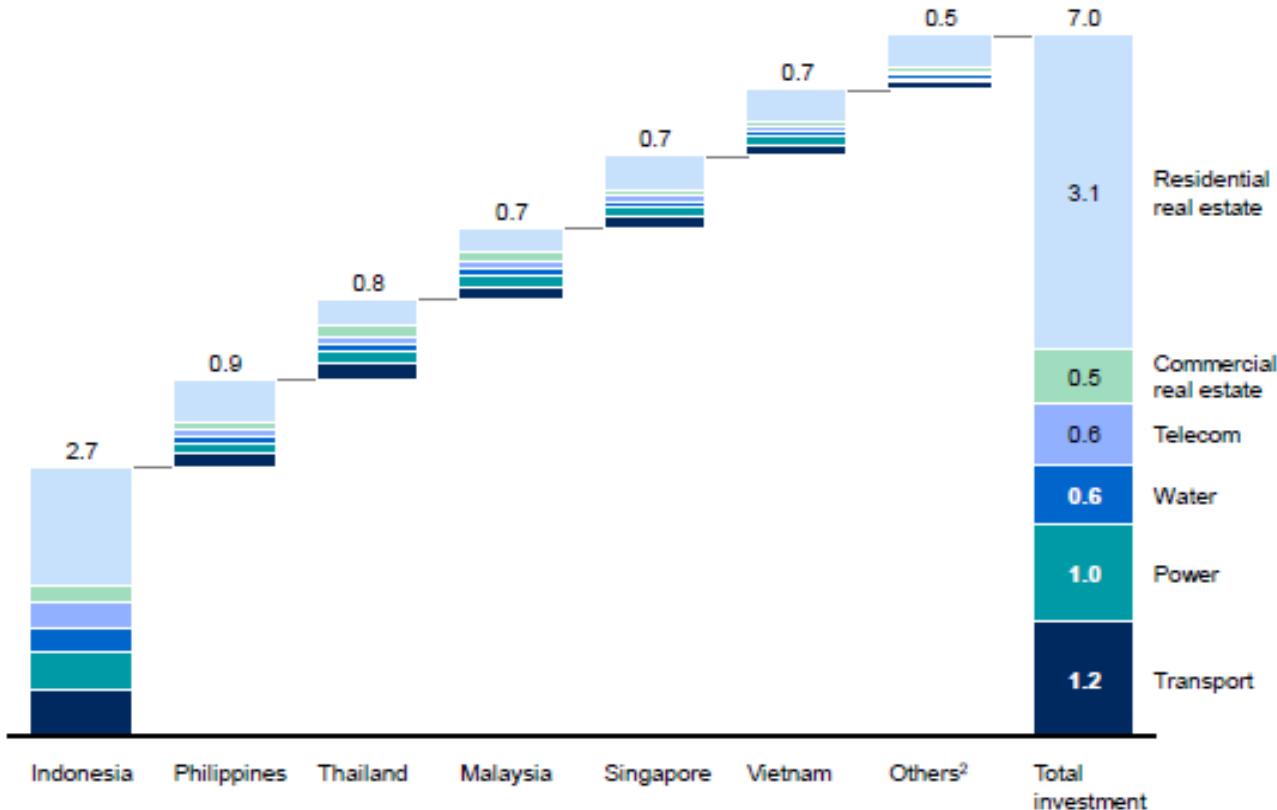
# ASEAN Infrastructure Needs

## Exhibit 36

ASEAN needs an estimated \$7 trillion in infrastructure, housing, and real estate investment to support growth

Required infrastructure and real estate investment, 2014–30<sup>1</sup>

\$ trillion



1. In 2013 real dollar terms.

2. Includes Brunei, Cambodia, Laos, and Myanmar.

NOTE: Numbers may not sum due to rounding.

SOURCE: Pike Research; IHS; McKinsey Global Institute analysis

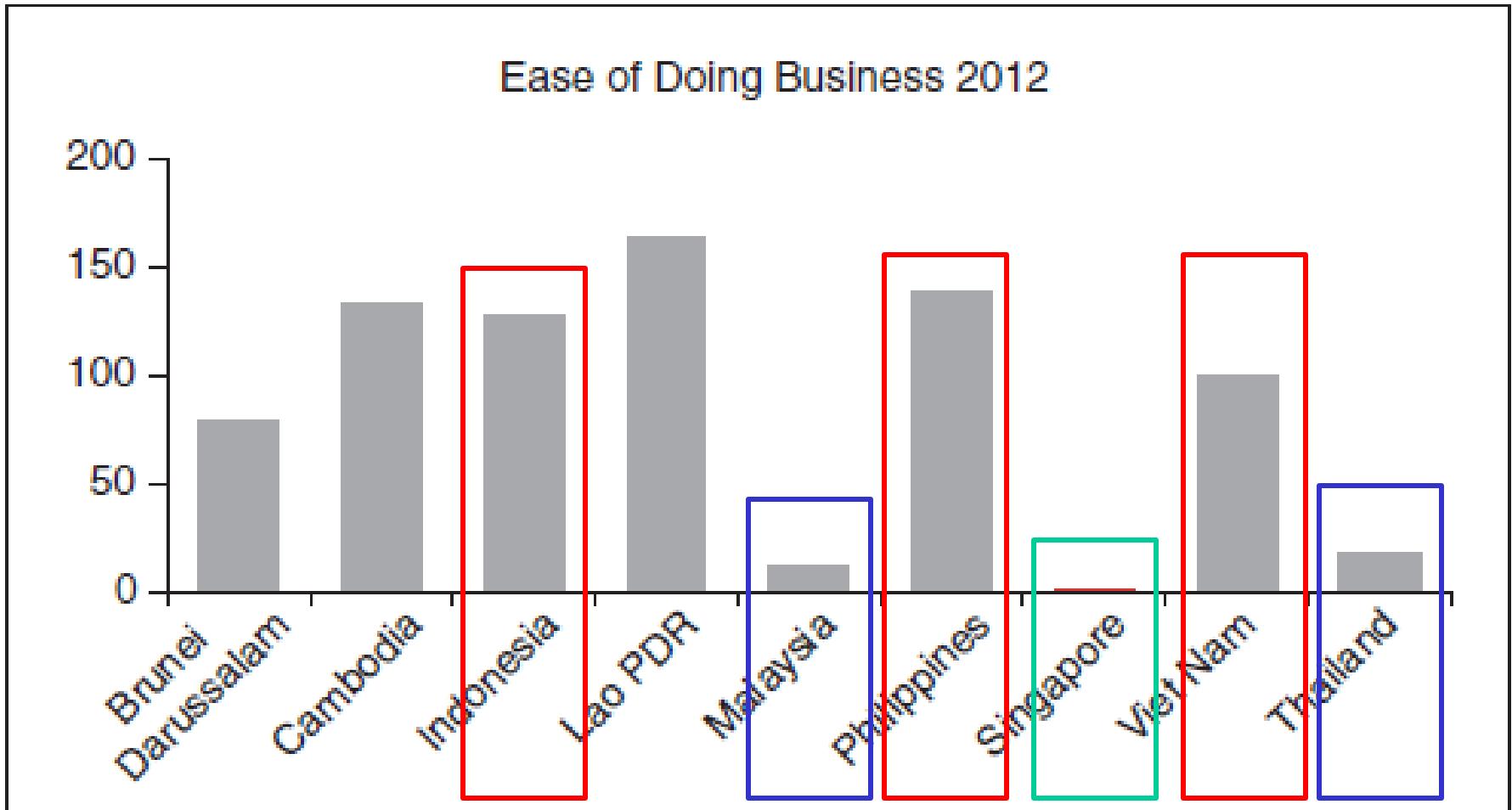
# Logistics Performance Index

Logistics Performance Index 2010, Country Rankings

Countries	LPI	Customs	Infrastructure	International Shipments	Logistics Competence	Tracking and Tracing	Timeliness
Cambodia	129	95	114	146	118	111	132
Indonesia	75	72	69	80	92	80	69
Lao PDR	118	113	132	97	137	113	89
Malaysia	29	36	28	13	31	41	37
Myanmar	133	146	134	131	148	129	82
Philippines	44	54	64	20	47	44	42
Singapore	2	2	4	1	6	6	14
Thailand	35	39	36	30	39	37	48
Viet Nam	53	53	66	58	51	55	76
Hong Kong, China	13	8	13	6	14	17	26
Taipei,China	20	25	22	10	22	12	30
Korea, Rep. of	23	26	23	15	23	23	28
PRC	27	32	27	27	29	30	36
India	47	52	47	46	40	52	56

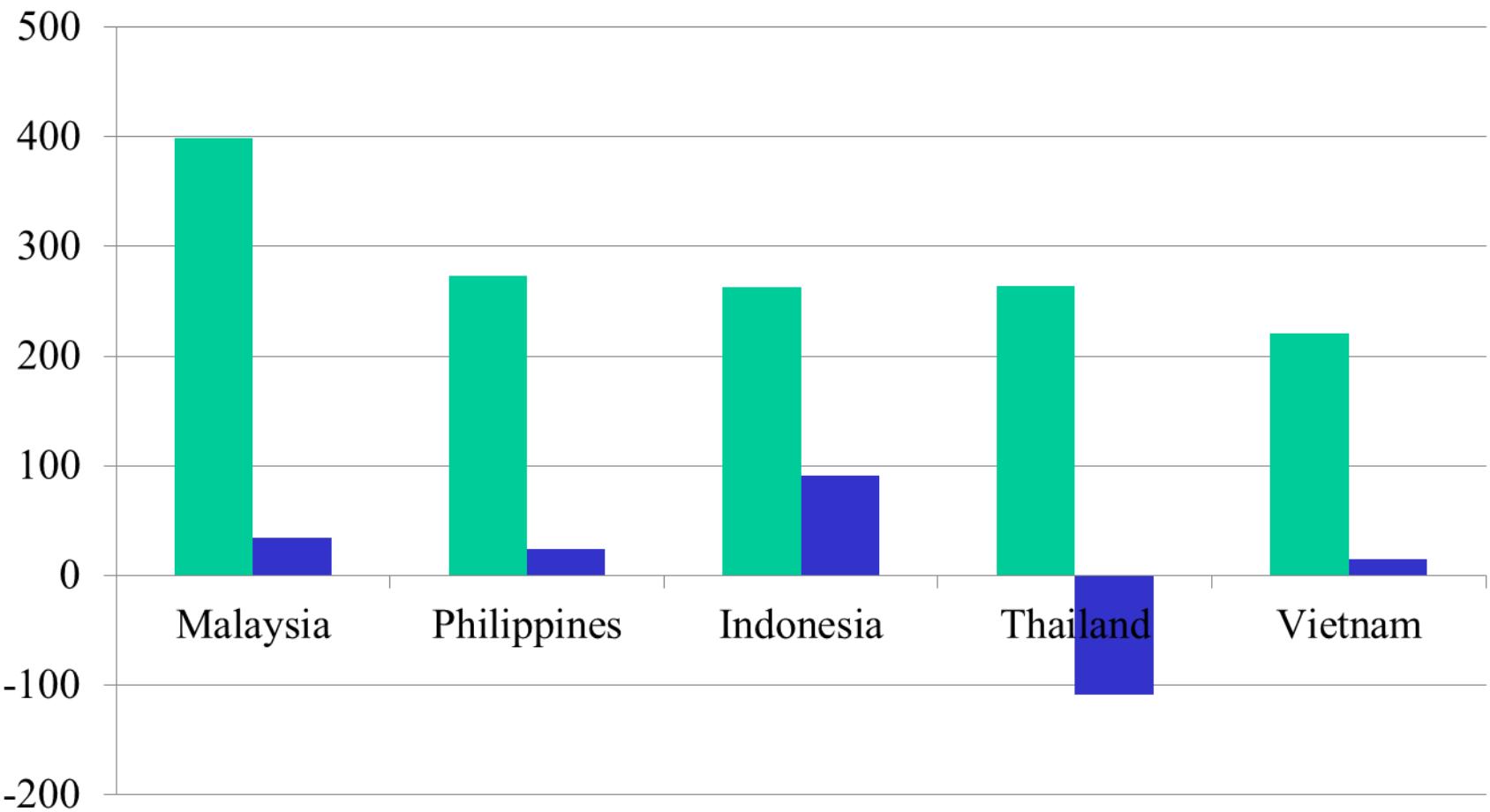
Source: <<http://go.worldbank.org/88X6PU5GV0>>.

# Ease of Doing Business



Source: World Bank and The Heritage Foundation.

# Level of Governance Indicators 2014 and Change from 2000 (in blue)



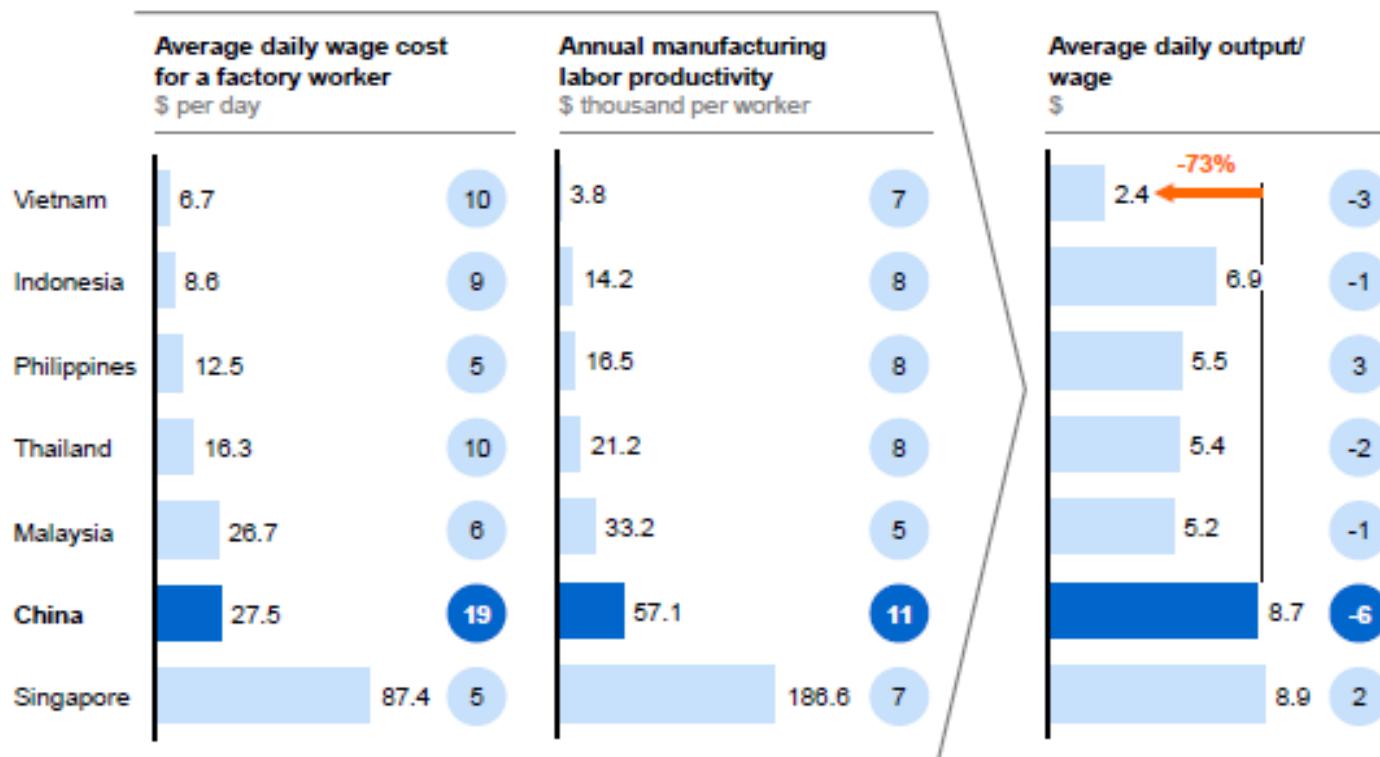
# ASEAN Labor Costs

## Exhibit E3

ASEAN's labor costs are lower than China's, but this competitive advantage is undermined by low productivity

2012

Compound annual growth rate, 2007–12 (%)



NOTE: Brunei, Cambodia, Laos, and Myanmar not included due to lack of available data. Analysis assumes Monday-Friday work and 4 weeks off work per year for all countries (combination of leave allowances and public holidays).

SOURCE: IHS; Statistics Indonesia; Bank of Thailand; Department of Statistics Malaysia; SingStat; Philippines Statistics Authority; General Statistics Office Vietnam; National Bureau of Statistics of China; Ministry of Human Resources Malaysia; McKinsey Global Institute analysis

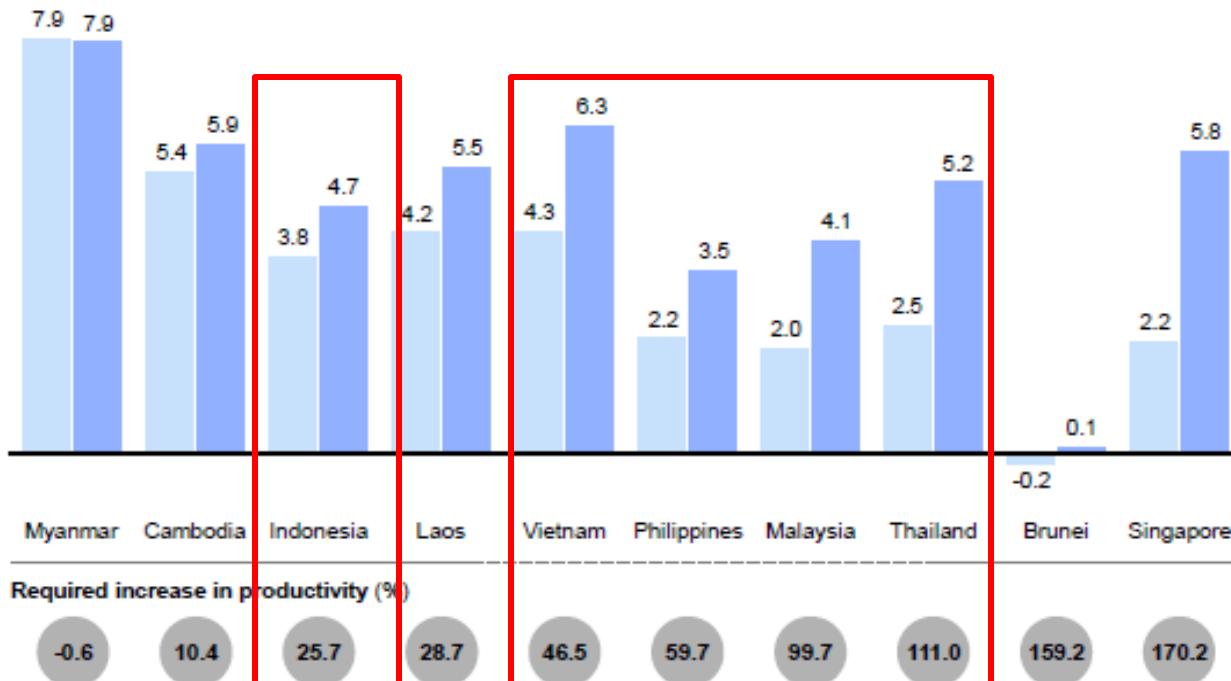
# ASEAN Labor Productivity

## Exhibit 5

**Most ASEAN countries will need to make sharp improvements in labor productivity to maintain historical growth rates**

Annual labor productivity compound annual growth rate %

- Historical productivity growth (2000–13)
- Required productivity growth (2013–30) to maintain historical growth rate<sup>1</sup>



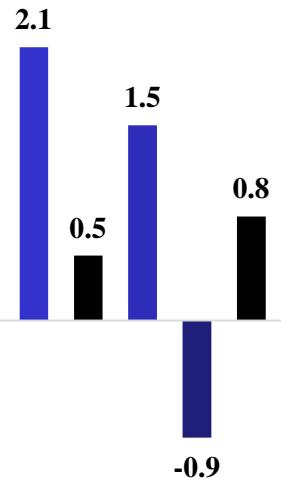
<sup>1</sup> Assuming that working-age population evolves according to estimates provided by the United Nations, with constant labor participation and employment rates.

NOTE: Numbers may not sum due to rounding.

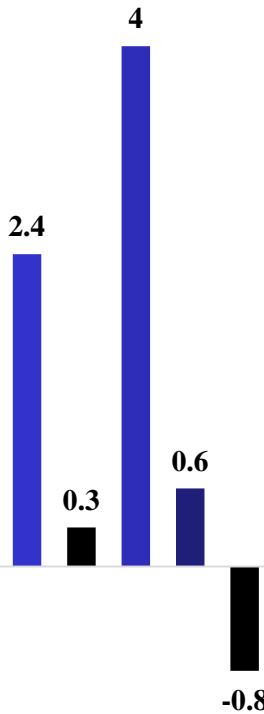
SOURCE: IHS; United Nations; World Bank; McKinsey Global Institute analysis

# Total Factor Productivity Growth (average annual %)

MALAYSIA



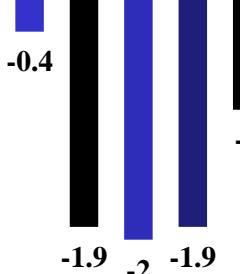
THAILAND



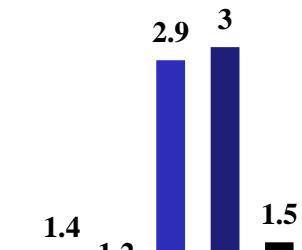
INDONESIA



VIETNAM



PHILIPPINES



Source: Conference Board, Total Economy Database, Summary Tables May 2015,

<https://www.conference-board.org/retrievefile.cfm?filename=The-Conference-Board-2015-Productivity-Brief-Summary-Tables-1999-2015.pdf&type=subsite>

(accessed April 11, 2016).

# Total Factor Productivity Growth (%)

HONG KONG

SINGAPORE

SOUTH KOREA

TAIWAN



Notes: Total Factor Productivity Growth (TFP) measures the growth of GDP over the combined contributions of total hours, workforce skills, machinery and structures and IT capital. Growth rates are calculated as log differences. Growth rates for 1999-2006 and 2007-2012 are the averages of yearly growth rates. Regional aggregates are weighted using shares in nominal PPP converted GDP.

Source: Conference Board, Total Economy Database, Summary Tables May 2015,

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<https://www.conference-board.org/retrievefile.cfm?filename=The-Conference-Board-2015-Productivity-Brief-Summary-Tables-1999-2015.pdf&type=subsite> (accessed April 11, 2016).

# Gross Enrollment Ratio (GER), Secondary

Country	Average GER (%)				
	'71 - '80	'81 - '90	'91 - '00	'01 - '10	'11 - '13
Singapore	n.a.	95.10 <sup>a</sup>	100.20	101.53	107.23
Hong Kong SAR, China	46.82	71.48	77.84	81.34	98.49
Korea, Rep.	57.05	89.11	98.53	94.98	97.43
Taiwan	n.a.	n.a.	n.a.	99.51 <sup>b</sup>	99.74
Malaysia	42.26	53.63	59.01	67.65	69.02 <sup>c</sup>
Thailand	23.87	29.23	49.06	72.17	86.75
Indonesia	22.24	40.57	50.06	66.40	82.25
Philippines	56.05	66.36	74.91	81.66	85.27
Vietnam	39.21 <sup>d</sup>	34.43 <sup>e</sup>	57.22 <sup>f</sup>	n.a.	n.a.

Notes:

<sup>a</sup>1990; <sup>b</sup>2008 – 2010; <sup>c</sup>2011 – 2012; <sup>d</sup>1976 – 1980; <sup>e</sup>1990; <sup>f</sup>1998.

Sources:

Ministry of Education, Singapore as quoted in data.gov.sg. [https://data.gov.sg/dataset/combined-and-gross-enrolment-ratio-for-primary-secondary-tertiary-education?view\\_id=6980f4ab-c66b-4ab0-ae2a-07e118df0230&resource\\_id=9dcdd20c-e24c-46a4-9044-cc2b2745a7fc](https://data.gov.sg/dataset/combined-and-gross-enrolment-ratio-for-primary-secondary-tertiary-education?view_id=6980f4ab-c66b-4ab0-ae2a-07e118df0230&resource_id=9dcdd20c-e24c-46a4-9044-cc2b2745a7fc), (retrieved April 18th 2016);

World Development Indicators (United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics);

National Statistics, Republic of China (Taiwan). <http://eng.stat.gov.tw/public/Attachment/4930175756IGBK0IN.xls>. (retrieved April 18th 2016).

# Gross Enrollment Ratio (GER), Tertiary

Country	Average GER (%)				
	'71 - '80	'81 - '90	'91 - '00	'01 - '10	'11 - '13
Singapore	n.a.	23.50	37.80	54.63	78.67
Hong Kong SAR, China	8.54	17.20	28.93	44.29	62.80
Korea, Rep.	8.74	29.70	55.44	91.55	98.32
Taiwan	n.a.	n.a.	n.a.	83.04 <sup>a</sup>	83.89
Malaysia	3.96 <sup>b</sup>	5.78	15.43	30.63	36.59 <sup>c</sup>
Thailand	4.70	17.32	23.48	44.49	51.74
Indonesia	2.67	6.14	11.89	18.67	29.36 <sup>b</sup>
Philippines	18.92	25.77	27.79	28.82	32.09
Vietnam	2.19 <sup>d</sup>	2.29	5.03	15.35	24.54

Notes:

<sup>a</sup>2008 – 2010; <sup>b</sup>1979 – 1980; <sup>c</sup>2011 – 2012; <sup>d</sup>1976 – 1980.

Sources:

Ministry of Education, Singapore as quoted in Data.gov.sg. [https://data.gov.sg/dataset/combined-and-gross-enrolment-ratio-for-primary-secondary-tertiary-education?view\\_id=6980f4ab-c66b-4ab0-ae2a-07e118df0230&resource\\_id=9dcdd20c-e24c-46a4-9044-cc2b2745a7fc](https://data.gov.sg/dataset/combined-and-gross-enrolment-ratio-for-primary-secondary-tertiary-education?view_id=6980f4ab-c66b-4ab0-ae2a-07e118df0230&resource_id=9dcdd20c-e24c-46a4-9044-cc2b2745a7fc), (retrieved April 18th 2016);

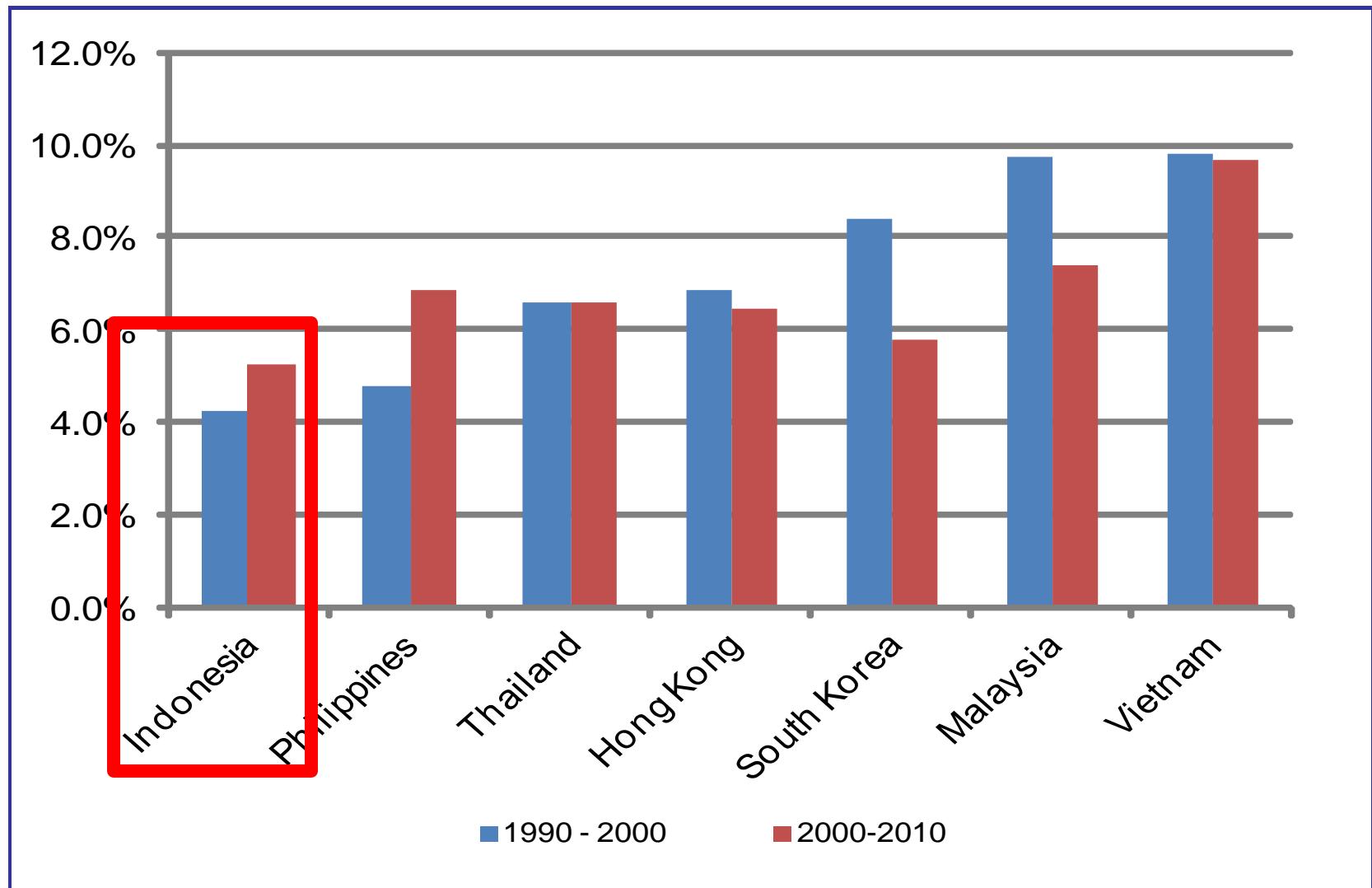
World Development Indicators (United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics);

National Statistics, Republic of China (Taiwan). <http://eng.stat.gov.tw/public/Attachment/4930175756IGBKG0IN.xls>. (retrieved April 18th 2016).

# Case Study: Indonesia

- GOI's primary development objective is to join the ranks of upper middle-income countries by 2025
- To achieve this, over the next decade Indonesia must double shared prosperity – it must generate an annual real GDP per capita growth rate of 8.5%
- At the present maximum rate of 4.5%, not only will Indonesia fall well short of its objective, but it will continue to experience jobless growth, declining competitiveness, and rising inequality
- Other clear indicators of current trends are the long-term decline in TFP, more recent fall in manufacturing value added per employee, and steadily rising measures of inequality such as the Gini coefficient

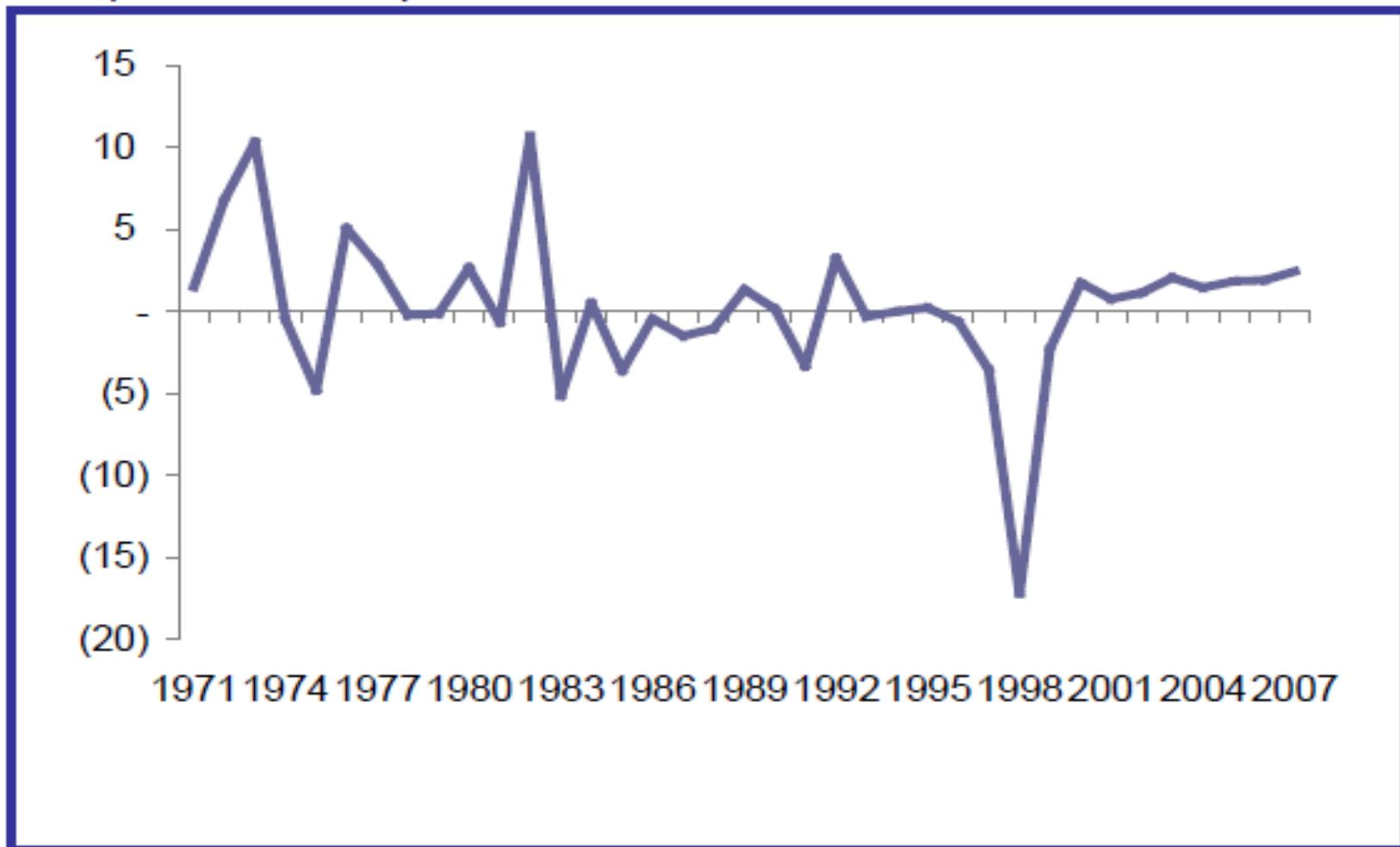
# Indonesia and Country Peers - GDP Growth Rates (CAGR, %)



Source: World Bank

# Total Factor Productivity in Indonesia

TFP (% Growth Rate)

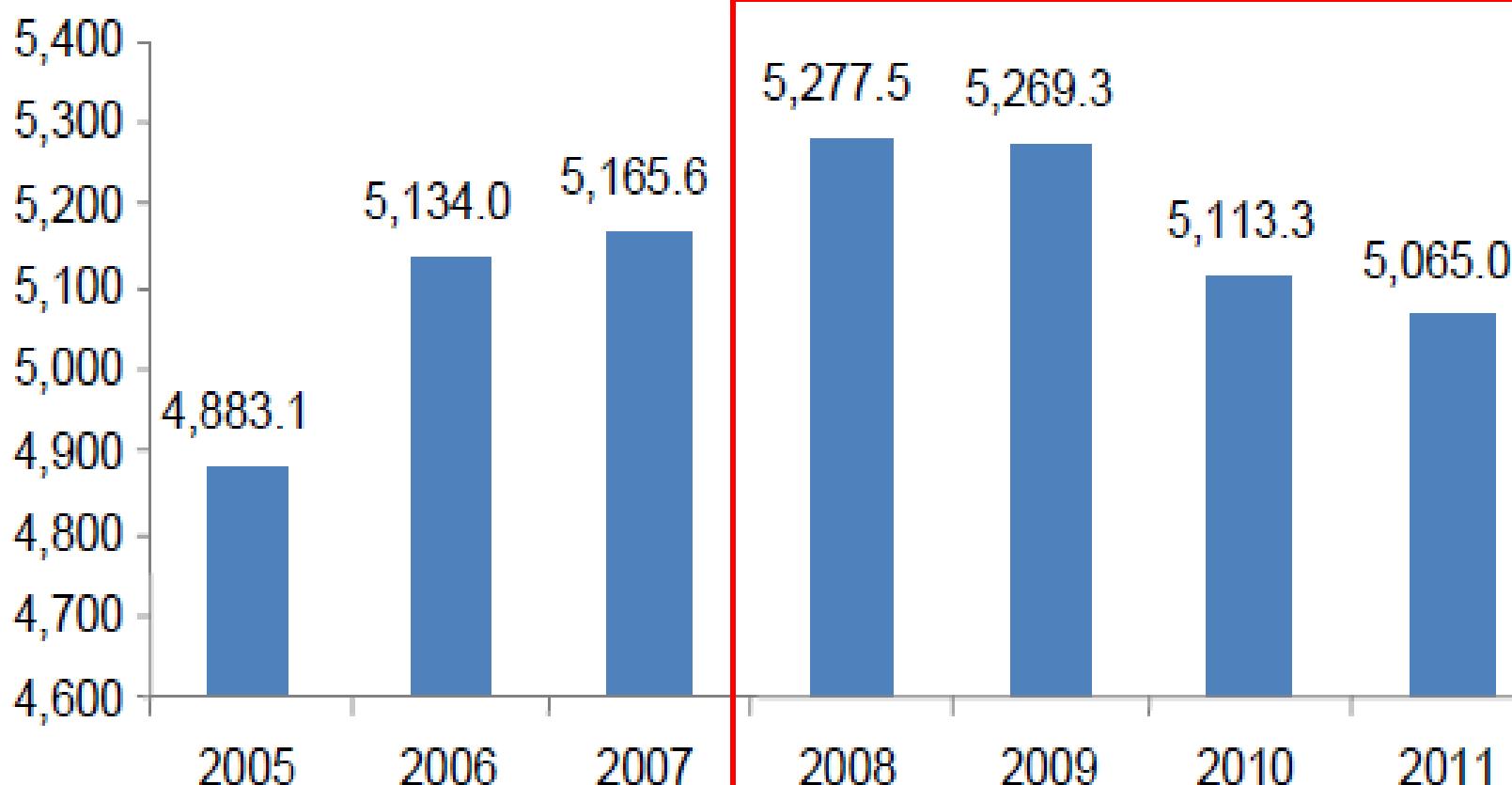


Source: Pierre Van Der Eng, 2009 "Total Factor Productivity and Economic Growth in Indonesia" - BPS and National Accounts

# Indonesia Labor Force Quality

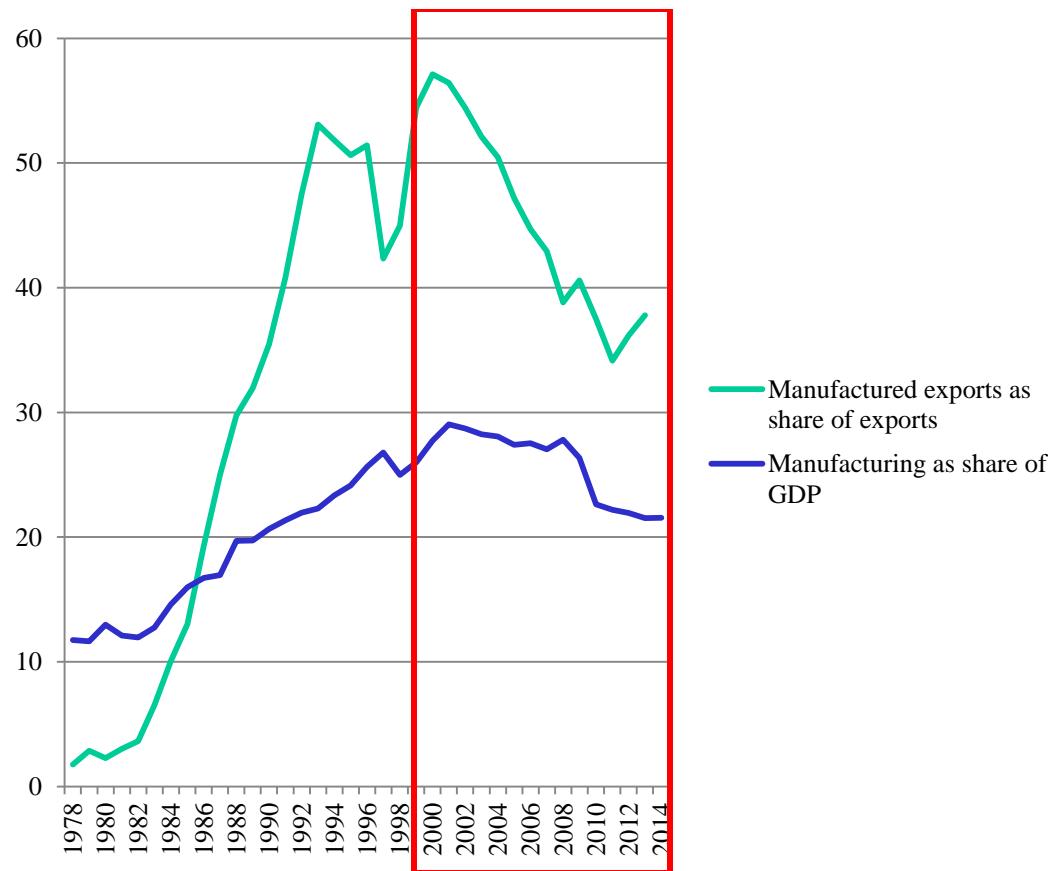
- Share of workers with middle school graduation or less fell from 78% in 2000 to 65% in 2014
- PISA scores are very low in math, science, reading (75% to 80% of average)
- Share of those with “regular employment” rose from 33% in 2000 to 37% in 2014 – most are casual, temporary or family/unpaid workers

## Manufacturing Value-Added per Employee (USD)



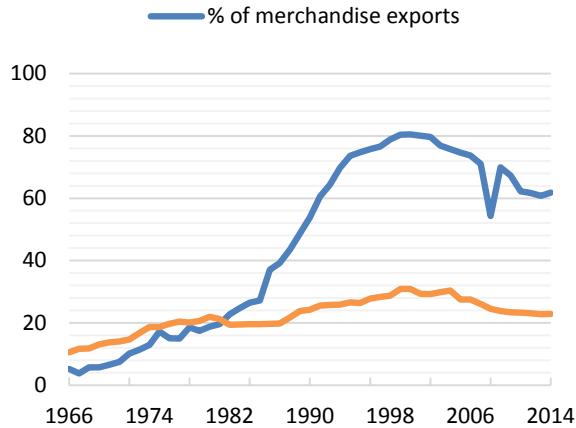
Source: World Bank

# Share of Manufacturing in Exports and GDP (1978-2014)

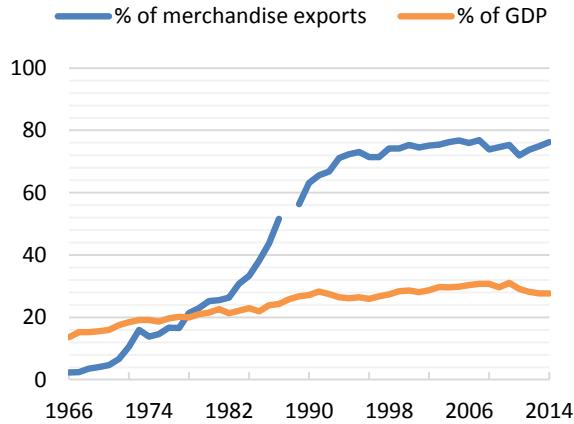


# Share of Manufactures (%)

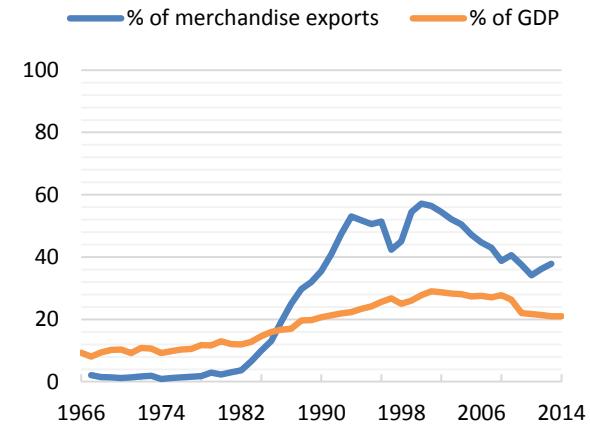
## Malaysia



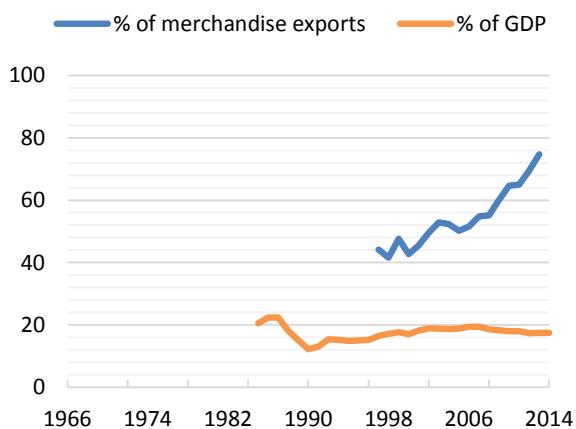
## Thailand



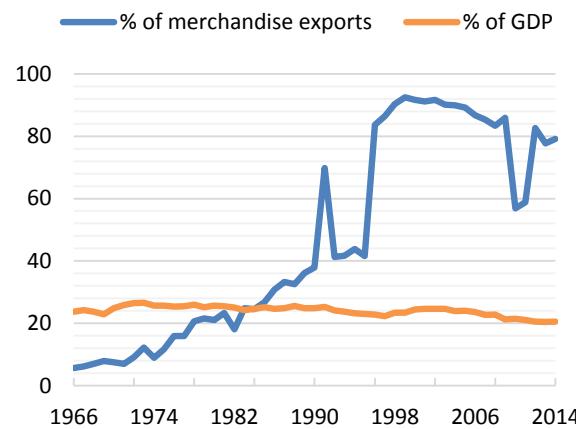
## Indonesia



## Vietnam



## Philippines



Source:

World Bank staff estimates from the Comtrade database maintained by the United Nations Statistics Division.

# Average Share of Manufactures

Country	'66 - '75		'76 - '85		'86 - '95		'96 - '05		'06 - '14	
	% Exports	% GDP								
Singapore	32.8	22.2	47.0	24.0	73.3	25.7	84.4	25.7	72.7	21.4
Hong Kong SAR, China	95.7	n.a.	96.0	n.a.	94.5	n.a.	94.0	3.6	78.2*	1.8
Korea Rep.	76.9	17.6	89.3	23.4	92.9	25.9	91.6	26.6	87.6	29.7
Taiwan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	98.8**	28.4***
Malaysia	8.7	14.4	20.6	20.2	56.5	24.0	77.9	29.3	64.7	24.2
Thailand	7.8	16.9	25.7	21.3	61.8	26.3	74.5	28.3	74.8	29.5
Indonesia	1.5	9.7	4.6	12.5	38.5	20.7	51.1	27.3	39.1*	24.0
Philippines	8.3	25.0	21.3	25.2	40.9	24.4	89.7	23.8	77.4	21.6
Vietnam	n.a.	n.a.	n.a.	n.a.	n.a.	16.4	47.4	17.7	61.9*	18.2

Notes:

\*2006 – 2013; \*\*2008-2014; \*\*\*2007-20014

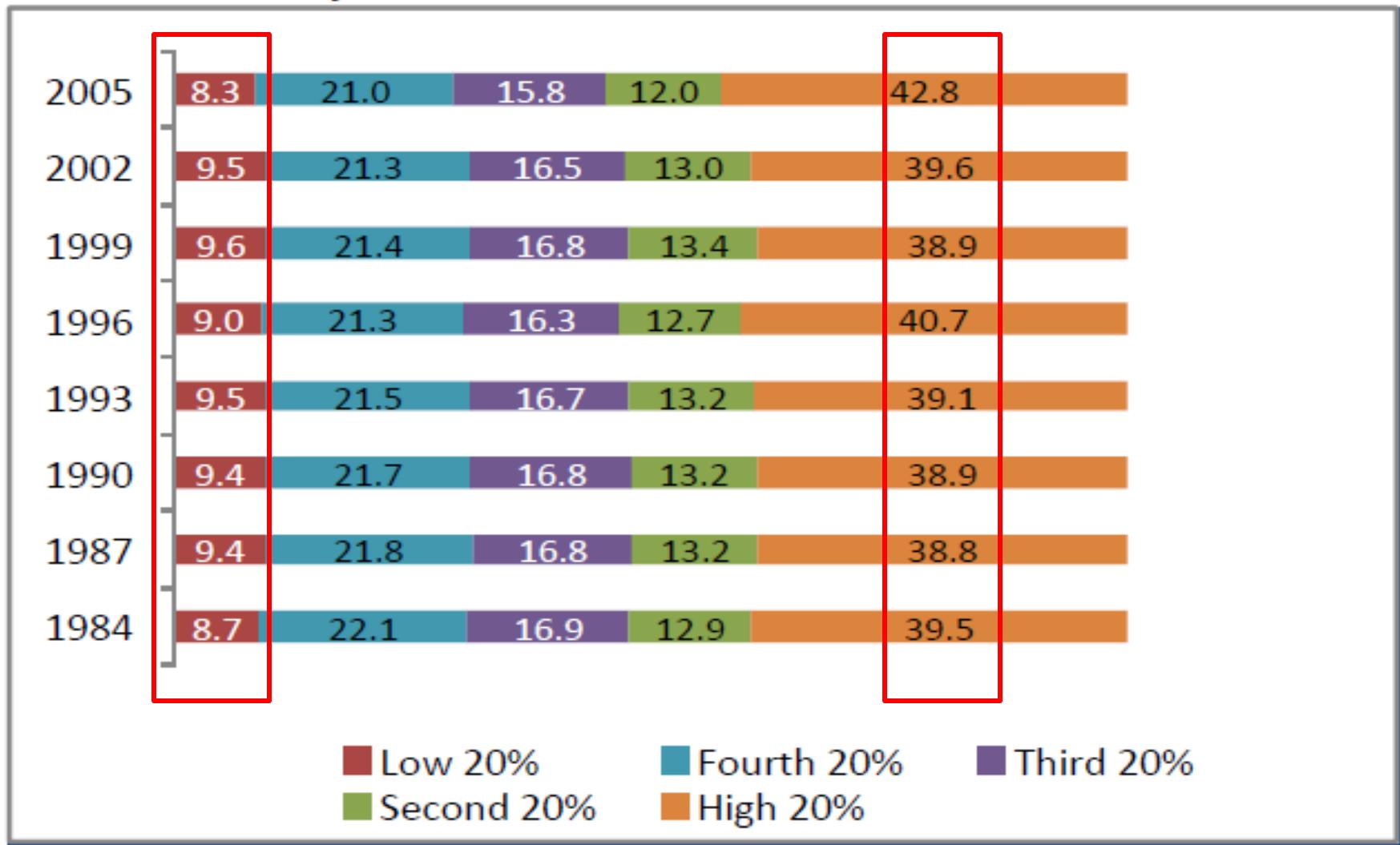
Source:

World Development Indicators (World Bank National Accounts Data, and OECD National Accounts Data Files).

Department of Statistics, Ministry of Finance Taiwan and DGBAS Executive Yuan.

# Measures and Trends of Inequality in Indonesia

Share of Income by Percentile of Income



# Indonesia – Selected Indicators

	1995	2000	2005	2007	2008	2009	2010	2011
<b>Population</b>								
Total, million	194.8	206.3	220.9	224.2	227.6	234.4	237.6	241.0
<b>Age distribution (per cent)</b>								
0-14	33.1	30.2	28.5	27.7	27.4	27.0	26.7	26.4
15-64	62.7	65.0	66.3	66.9	67.2	67.4	67.7	67.9
65+	4.2	4.7	5.2	5.4	5.5	5.6	5.6	5.7
Absolute poverty rate (per cent) <sup>(1)</sup>	-	19.1	16.0	16.6	15.4	14.2	13.3	12.5
Gini coefficient	0.36	-	0.36	0.36	0.35	0.37	0.38	0.41
Net enrolment ratio (secondary education, per cent)	-	46.7	56.0	65.7	64.5	65.1	67.3	-
<b>Employment and inflation</b>								
Employment (million)	80.1	89.8	93.4	99.9	102.6	104.9	108.2	109.7
Informal employment (per cent of employment)	-	-	69.5	69.5	69.6	69.3	66.9	62.2
Unemployment rate (per cent)	-	6.1	11.2	9.1	8.4	7.9	7.1	6.6
CPI inflation (per cent, end-of-year)	9.0	9.3	17.1	6.6	10.2	2.8	7.0	3.8
<b>Supply and demand</b>								
GDP (current trillion rupiah)	454.5	1,389.8	2,774.3	3,950.9	4,948.7	5,606.2	6,436.3	7,427.1
GDP (current USD billion)	202.4	166.1	285.6	432.2	512.7	543.3	708.8	846.1
GDP growth (real, per cent)	8.2	4.9	5.7	6.3	6.0	4.6	6.2	6.5
GDP per capita growth rate (real, per cent)	6.1	4.5	4.4	5.3	4.9	3.6	2.3	5.4
<b>Demand (growth, per cent)</b>								
Private consumption	12.6	1.6	4.0	5.0	5.3	4.9	4.7	4.7
Public consumption	1.3	6.5	6.6	3.9	10.4	15.7	0.3	3.2
Gross fixed investment	14.0	16.7	10.9	9.3	11.9	3.3	8.5	8.8
Exports	7.7	26.5	16.6	8.5	9.5	(9.7)	15.3	13.6
Imports	20.9	25.9	17.8	9.1	10.0	(15.0)	17.3	13.3
<b>Supply (per cent of nominal GDP)</b>								
Agriculture	-	15.6	13.1	13.7	14.5	15.3	15.3	14.7
Mining	-	12.1	11.1	11.2	10.9	10.6	11.2	11.9
Manufacturing	-	27.7	27.4	27.0	27.8	26.4	24.8	24.3
Services <sup>(2)</sup>	-	44.6	48.3	48.1	46.8	47.8	48.7	49.1
<b>Public finances (state government, per cent of GDP)</b>								
Revenue	15.7	14.8	17.9	17.9	19.8	15.1	15.5	16.3
Expenditure	14.4	15.9	18.4	19.2	19.9	16.7	16.2	17.4
Nominal balance	1.3	(1.2)	(0.5)	(1.3)	(0.1)	(1.6)	(0.7)	(1.1)
Gross debt	-	88.8	47.3	35.2	33.1	28.4	26.1	24.3
<b>External sector (per cent of GDP)</b>								
Trade balance	3.2	15.1	6.1	7.6	4.5	5.7	4.3	4.1
Current account balance	(3.2)	4.9	0.1	2.4	-	1.9	0.7	0.2
In USD billion	(6.4)	8.0	0.3	10.5	0.1	10.6	5.1	1.7
International reserves (gross, USD billion)	-	-	34.7	56.9	51.6	66.1	96.2	110.1
Outstanding external debt (end-of-year)	-	85.3	45.8	31.6	30.2	31.8	28.6	26.5

Source: Statistics Indonesia, Government financial statement (audited), World Bank and OECD

Notes:

(1) Per cent of people below the national poverty line, where the latter is the value of per capita expenditure per month needed for a person to stay in decent living conditions.

(2) Includes electricity, gas, water and construction.

# The Narrative (continued)

- Binding constraint to accelerating sustainable, inclusive growth is that Indonesia exploits neither the domestic benefits of being a large country nor its international dynamic comparative advantage
- Indonesia is beset by local economic fragmentation and global economic marginalization
  - The sum is worth less than the parts – Indonesia does not have an integrated domestic economy; instead, it is a collection of disconnected local and regional markets
  - Indonesia has also undergone significant disengagement from global production and distribution value chains; instead its growth is dependent on commodities and old industries instead of high value-added products

# The Narrative (continued)

- Extending and integrating the domestic market, and linking it better to global value chains, will reduce economic distance, diminish trade & exchange barriers
- The key to addressing both domestic and international market problems is the same, namely better hard infrastructure (ports, power, roads), soft infrastructure (government and governance), and wet infrastructure (human resources)
- This will reduce the costs of logistics and transactions, and promote productive employment and livelihoods
- Effective implementation of new development policies requires adroit management of the horizontal politics (executive-legislative relations) and vertical politics (intergovernmental relations) of getting things done

