

Marriage, Cohabitation, or Estrangement? A Five-Year Assessment of the ASEAN Economic Community (AEC)



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Roadmap of Presentation

- ASEAN economic and political trends
- ASEAN opportunities and challenges
- ASEAN Economic Community (AEC)

ASEAN Economic & Political Trends



ASEAN Diversity (1)

	Year of entry into ASEAN
Brunei	1984
Cambodia	1999
Indonesia	1967
Laos	1997
Malaysia	1967
Myanmar	1997
Philippines	1967
Singapore	1967
Thailand	1967
Vietnam	1995



ASEAN Diversity (2)

Table 1.1. Number of Mid Year Population³ in ASEAN, 2009-2018

(in thousand)

Country	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Brunei Darussalam	380.1	386.8	393.4	399.8	406.2	411.9	412.4	417.3	429.5	442.4
Cambodia	14,085.3	14,302.8	14,521.3	14,741.4	14,676.5	14,932.3	15,191.7	15,453.9	15,717.7	15,981.8
Indonesia	231,369.5	234,181.4	241,990.7	245,425.2	248,818.1	252,164.8	255,461.7	258,705.0	261,890.9	265,015.3
Lao PDR	6,127.9	6,256.2	6,385.1	6,514.4	6,644.0	6,809.1	6,492.0	6,621.1	6,752.8	6,887.1
Malaysia	28,081.5	28,588.6	29,062.0	29,510.0	30,213.7	30,708.5	31,186.1	31,633.5	32,022.6	32,385.0
Myanmar	50,110.0	50,537.0	50,149.0	50,667.0	51,184.0	51,991.0	52,450.0	52,917.0	53,388.0	53,625.0
Philippines	92,226.6	93,135.1	94,823.8	96,510.9	98,196.5	99,880.3	101,562.3	103,242.9	104,921.4	106,598.6
Singapore	4,987.6	5,076.7	5,183.7	5,312.4	5,399.2	5,469.7	5,535.0	5,607.3	5,612.3	5,638.7
Thailand	66,903.0	65,921.1	66,214.0	66,491.7	66,754.6	67,002.6	67,236.0	67,454.7	67,653.2	67,831.6
Viet Nam	86,025.0	86,947.4	87,860.4	88,809.3	89,759.5	90,728.9	91,709.8	92,695.1	93,671.6	94,666.0
ASEAN	580,296.5	585,333.1	596,583.4	604,382.2	612,052.3	620,099.1	627,237.0	634,747.8	642,059.9	649,071.5

Table 1.2. Population Growth in ASEAN, 2009-2018

(in percent)

Country	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Brunei Darussalam	1.4	1.8	1.7	1.6	1.6	1.4	0.1	1.2	2.9	3.0
Cambodia	2.1	1.5	1.5	1.5	-0.4	1.7	1.7	1.7	1.7	1.7
Indonesia	1.2	1.2	3.3	1.4	1.4	1.3	1.3	1.3	1.2	1.2
Lao PDR	2.1	2.1	2.1	2.0	2.0	2.5	-4.7	2.0	2.0	2.0
Malaysia	1.9	1.8	1.7	1.5	2.4	1.6	1.6	1.4	1.2	1.1
Myanmar	0.8	0.9	-0.8	1.0	1.0	1.6	0.9	0.9	0.9	0.4
Philippines	2.0	1.0	1.8	1.8	1.7	1.7	1.7	1.7	1.6	1.6
Singapore	3.1	1.8	2.1	2.5	1.6	1.3	1.2	1.3	0.1	0.5

Table 1.3. Population Density¹⁾ in ASEAN, 2009-2018

Country	Total Area (Sq. Km)	Population Density (per Sq. Km)										Rank of Pop. Density in 2018
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Brunei Darussalam	5,765.0	70.0	67.1	68.2	69.3	70.5	71.4	71.5	72.4	74.5	76.7	9
Cambodia	181,035.0	77.8	79.0	80.2	81.4	81.1	82.5	83.9	85.4	86.8	88.3	7
Indonesia	1,916,862.2	120.7	122.2	126.2	128.0	129.8	131.6	133.3	135.0	136.6	138.3	4
Lao PDR	236,800.0	25.9	26.4	27.0	27.5	28.1	28.8	27.4	28.0	28.5	29.1	10
Malaysia	331,388.0	84.7	86.3	87.7	89.0	91.2	92.7	94.1	95.5	96.6	97.7	6
Myanmar	676,576.0	87.0	88.0	89.0	89.0	75.7	76.8	77.5	78.2	78.9	79.3	8
Philippines	300,000.0	307.4	310.5	316.1	321.7	327.3	332.9	338.5	344.1	349.7	355.3	2
Singapore	719.9	7,025.0	7,146.0	7,273.0	7,379.4	7,499.9	7,597.9	7,688.6	7,789.0	7,795.9	7,832.6	1
Thailand	513,139.5	130.4	128.5	129.0	129.6	130.1	130.6	131.0	131.5	131.8	132.2	5
Viet Nam	331,230.0	259.7	262.5	265.3	268.1	271.0	273.9	276.9	279.9	282.8	285.8	3
ASEAN	4,493,515.6	129.1	130.3	132.8	134.5	136.2	138.0	139.6	141.3	142.9	144.4	-

Source:
ASEAN Secretariat

Note:
1) Derived from Table 1.1 and figures on land area

ASEAN Diversity (3)

Table 1.6. Urban Population in ASEAN, 2009-2018

(in percent)

Country	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Brunei Darussalam	-	75.7	78.5	78.7	77.0	76.9	78.0	78.0	77.0	77.6
Cambodia	19.5	19.9	21.0	21.5	21.4	22.5	23.0	23.5	24.0	23.4
Indonesia	-	49.8	51.2	51.9	52.0	53.0	53.3	54.0	55.0	55.3
Lao PDR	-	33.2	35.0	35.3	36.0	37.6	38.0	40.0	34.0	35.0
Malaysia	63.7	71.0	71.9	72.7	73.0	74.0	74.0	74.8	75.2	75.6
Myanmar	-	30.7	30.8	30.8	30.8	30.0	30.0	35.0	30.0	30.6
Philippines	-	45.3	48.5	48.6	45.0	44.0	44.0	44.0	47.0	46.9
Singapore	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Thailand	-	-	36.1	33.9	44.5	49.0	49.0	52.0	49.0	49.9
Viet Nam	29.6	30.5	31.6	31.9	32.2	33.1	33.9	34.4	35.0	35.7
ASEAN ¹	-	44.6	45.0	45.2	45.9	46.8	47.1	48.3	48.5	48.9

Table 12.1. Human Development Index (HDI) in ASEAN, 2009-2018

Country	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Brunei Darussalam	0.845	0.846	0.852	0.860	0.863	0.864	0.865	0.852	0.853	0.845
Cambodia	0.519	0.533	0.540	0.546	0.553	0.558	0.563	0.576	0.582	0.581
Indonesia	0.656	0.662	0.669	0.677	0.682	0.686	0.689	0.691	0.694	0.707
Lao PDR	0.535	0.542	0.554	0.563	0.573	0.582	0.586	0.598	0.601	0.604
Malaysia	0.764	0.774	0.776	0.779	0.783	0.787	0.789	0.799	0.802	0.804
Myanmar	0.515	0.526	0.533	0.540	0.547	0.552	0.556	0.574	0.578	0.584
Philippines	0.662	0.669	0.666	0.671	0.676	0.679	0.682	0.696	0.699	0.712
Singapore	0.889	0.911	0.917	0.920	0.922	0.924	0.925	0.930	0.932	0.935
Thailand	0.711	0.720	0.729	0.733	0.737	0.738	0.740	0.748	0.755	0.765
Viet Nam	0.647	0.655	0.662	0.668	0.675	0.678	0.683	0.689	0.694	0.693

Table 2.7. Infant Mortality Rate (IMR) and Under Five Mortality Rate in ASEAN, 2009-2018

Country	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Infant Mortality Rate (IMR)¹										
Brunei Darussalam	7.4	6.1	8.3	9.3	7.8	7.3	8.8	8.1	9.3	9.0
Cambodia	60.0	44.9	36.0	33.0	-	28.0	27.0	26.3	25.0	24.0
Indonesia	-	34.0	34.0	27.9	27.2	26.6	22.2	25.5	21.0	21.0
Lao PDR	59.2	56.6	68.0	51.5	48.9	46.5	57.0	48.9	49.0	38.0
Malaysia	6.9	6.7	6.5	6.2	6.3	6.7	6.9	6.7	6.9	6.2
Myanmar ²	27.2	27.1	38.4	37.3	35.3	45.9	44.8	43.8	42.8	37.0
Philippines	23.9	27.0	20.0	-	-	-	23.0	21.5	21.0	22.0
Singapore	2.2	2.0	2.0	1.8	2.0	1.8	1.7	2.4	2.2	2.1
Thailand	7.1	7.0	6.6	6.8	6.4	6.5	6.2	6.4	5.9	8.0
Viet Nam	16.0	15.8	15.5	15.4	15.3	14.9	14.7	14.5	14.4	14.2
Under-5 mortality rate³										
Brunei Darussalam	8.2	7.2	10.0	10.3	9.7	8.7	9.9	10.1	11.3	10.8
Cambodia	-	54.0	43.0	40.0	-	-	35.0	30.6	29.0	28.0
Indonesia	-	42.0	32.0	40.0	-	-	26.3	26.4	25.0	25.0
Lao PDR	80.4	76.4	79.0	68.4	64.3	-	86.0	63.9	63.0	47.0
Malaysia	8.6	8.4	8.0	7.6	7.9	8.3	8.4	8.1	8.4	7.7
Myanmar	36.5	34.9	45.2	44.7	43.0	66.5	65.3	64.0	62.6	46.0
Philippines	-	36.0	25.0	-	-	-	31.0	27.1	27.0	28.0
Singapore	2.8	2.9	2.9	2.7	2.6	2.5	2.6	2.7	2.8	2.7
Thailand	9.8	9.8	9.0	9.0	9.0	-	8.6	12.2	10.0	9.0
Viet Nam	24.1	23.8	23.3	23.2	23.1	22.4	22.1	21.8	21.5	21.4

ASEAN Diversity (4)

Table 4.4. GDP at Current Prices in USD¹⁾ in ASEAN, 2009-2018

(in US\$ Million)

Country	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Brunei Darussalam	14,450.6	10,815.4	13,741.1	18,534.2	19,049.6	18,100.5	17,102.6	12,943.2	11,447.6	12,136.0	13,567.6
Cambodia	11,073.4	10,353.7	11,229.3	12,803.9	14,010.9	15,442.9	16,763.6	18,091.1	19,426.6	22,041.8	24,608.7
Indonesia	512,753.0	545,854.5	710,068.3	846,522.6	874,638.9	904,691.9	889,384.6	855,020.1	930,836.5	1,013,808.3	1,039,864.4
Lao PDR	5,290.9	5,594.9	6,752.0	8,060.6	10,192.5	11,955.3	13,274.1	14,420.1	15,893.3	16,952.8	18,095.7
Malaysia	231,382.0	202,627.4	250,772.9	298,141.8	314,895.1	322,159.3	337,455.7	299,483.8	298,681.1	321,538.9	358,411.7
Myanmar ²⁾	24,408.5	26,961.5	41,003.6	56,502.0	60,281.7	61,862.6	66,331.1	59,795.3	64,632.3	66,671.0	77,263.6
Philippines	173,427.3	168,643.9	199,975.9	224,155.5	250,457.9	268,800.1	284,913.5	292,508.1	304,619.7	313,898.0	329,061.8
Singapore	192,239.5	192,408.4	239,809.4	279,328.6	295,083.8	307,578.0	314,849.5	308,001.9	318,070.3	338,455.5	364,075.7
Thailand	291,802.7	282,052.2	341,518.9	370,932.8	397,764.0	420,616.2	407,303.5	401,658.3	412,373.7	455,777.6	505,107.1
Viet Nam	99,125.8	106,018.3	116,299.9	135,541.1	155,820.0	171,219.3	186,223.6	193,628.4	205,438.9	223,837.1	241,038.8
ASEAN³⁾	1,555,953.5	1,551,330.0	1,931,171.4	2,250,523.1	2,392,194.3	2,502,425.9	2,533,602.0	2,455,550.2	2,581,420.0	2,785,116.9	2,971,095.2

Source:
ASEAN Secretariat

Notes:

- 1) Computed based on Table 4.1, using period average exchange rate
- 2) Myanmar figures are calculated using the exchange rates as used in the IMF-WED Database of October 2019
- 3) As a proxy, the combined GDP of ASEAN is computed as the sum of GDP at current price of ASEAN Member Countries

Table 4.5. GDP per Capita at Current Prices in USD¹⁾ in ASEAN, 2009-2018

(in US\$)

Country	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Brunei Darussalam	38,534.8	28,454.0	35,525.2	47,116.2	47,647.8	44,560.5	41,521.3	31,385.0	27,435.5	28,256.0	30,668.3
Cambodia	802.7	735.1	785.1	881.7	950.4	1,052.2	1,122.6	1,190.9	1,257.1	1,402.4	1,539.8
Indonesia	2,243.8	2,359.2	3,032.1	3,496.2	3,563.8	3,636.0	3,527.0	3,347.0	3,598.1	3,871.1	3,923.8
Lao PDR	881.8	913.0	1,079.3	1,262.4	1,564.6	1,799.4	1,949.5	2,221.2	2,400.4	2,510.5	2,627.5
Malaysia	8,393.3	7,215.7	8,771.8	10,258.8	10,670.8	10,662.7	10,989.0	9,603.1	9,441.9	10,041.0	11,067.2
Myanmar ²⁾	491.0	538.0	811.4	1,126.7	1,189.8	1,208.6	1,275.8	1,140.0	1,221.4	1,248.8	1,440.8
Philippines	1,917.2	1,828.6	2,147.2	2,363.9	2,595.1	2,737.4	2,852.5	2,880.1	2,950.5	2,991.7	3,086.9
Singapore	39,723.8	38,577.3	47,237.3	53,886.0	55,546.2	56,967.3	57,562.5	55,846.2	56,724.3	60,306.0	64,567.3
Thailand	4,389.2	4,215.8	5,180.7	5,602.0	5,982.2	6,300.9	6,078.9	5,973.9	6,113.3	6,737.0	7,446.5
Viet Nam	1,164.6	1,232.4	1,337.6	1,542.7	1,754.5	1,907.5	2,052.5	2,111.3	2,216.3	2,389.6	2,546.2
ASEAN³⁾	2,716.1	2,673.3	3,299.3	3,772.4	3,958.1	4,088.6	4,085.8	3,914.9	4,066.8	4,337.8	4,577.5

Source:
ASEAN Secretariat

Notes:

- 1) Computed based on Table 4.1, using period average exchange rate
- 2) Myanmar figures are calculated using the exchange rates as used in the IMF-WED Database of October 2019
- 3) As a proxy, the combined GDP per capita as GDP at current price divided by number of population

ASEAN Diversity (5)

Table 4.3. Rate of Economic Growth¹⁾ in ASEAN, 2009-2018

[in percent]

Country	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2010-2018
Brunei Darussalam	-1.8	2.6	3.7	0.9	-2.1	-2.5	-0.4	-2.5	1.3	0.1	-0.2
Cambodia	0.1	6.0	7.1	7.3	7.5	7.1	7.0	6.9	7.2	7.5	7.2
Indonesia	4.6	6.2	6.5	6.3	5.6	5.0	4.9	5.0	5.1	5.2	5.4
Lao PDR	7.5	8.1	8.0	7.9	8.0	7.6	7.3	7.0	6.9	6.3	7.4
Malaysia	-1.5	7.4	5.3	5.5	4.7	6.0	5.0	4.4	5.7	4.7	6.5
Myanmar	10.5	9.6	5.6	7.3	8.4	8.0	7.0	5.9	6.8	6.8	7.0
Philippines	1.1	7.6	3.7	6.7	7.1	6.1	6.1	6.9	6.7	6.2	6.2
Singapore	-0.6	15.2	6.4	4.1	5.1	3.9	2.2	3.0	3.7	3.2	4.7
Thailand	-0.7	7.8	0.9	7.5	2.9	1.1	3.7	3.6	4.2	4.3	3.5
Viet Nam	5.4	6.4	6.2	5.2	5.4	6.0	6.7	6.2	6.8	7.1	6.2
ASEAN²⁾	2.5	7.6	5.1	6.2	5.2	4.7	4.9	4.9	5.3	5.2	5.4

Source:
ASEAN Secretariat

Notes:
1) Computed based on Table 4.2 (GDP Constant Price)
2) ASEAN GDP growth is calculated as a weighted average using PPP-GDP share as used in the IMF-WEO Database of October 2019

Table 4.8. Inflation Rates in ASEAN, Year-on-Year Average of Period, 2009-2018

[in percent]

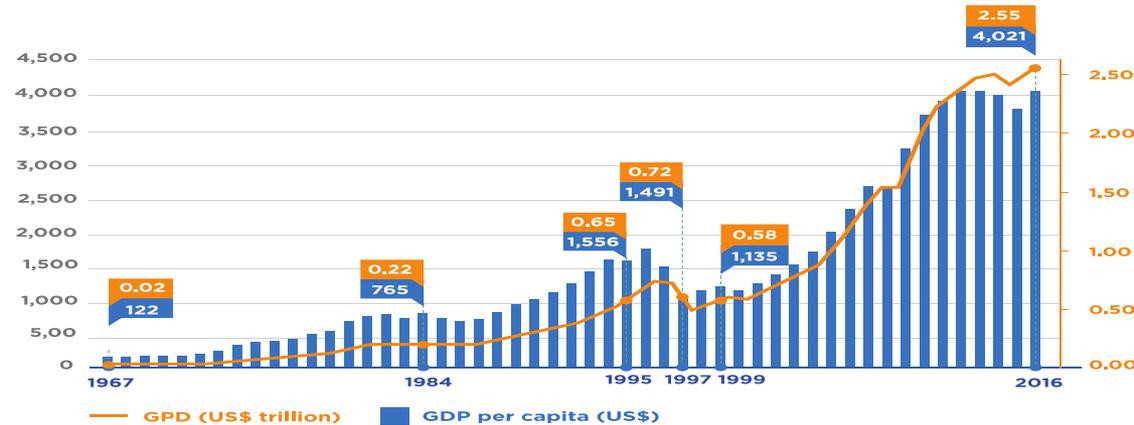
Country	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Brunei Darussalam	1.8	0.4	1.7	-5.9	0.4	-0.2	-0.4	-0.7	-0.2	0.1
Cambodia	-0.7	4.0	5.5	2.9	2.9	3.9	1.3	3.0	2.2	2.5
Indonesia	5.0	5.1	5.4	4.3	7.0	8.4	6.4	3.5	3.6	3.2
Lao PDR	0.03	6.0	7.6	4.3	6.4	4.2	1.3	1.6	0.8	2.0
Malaysia	0.6	1.7	3.2	1.7	2.1	4.2	2.1	2.1	3.7	0.9
Myanmar	2.2	8.2	2.8	2.8	5.7	5.5	10.8	7.0	4.5	6.9
Philippines	4.2	3.8	4.7	3.2	2.9	4.2	1.4	1.8	3.2	5.3
Singapore	0.6	2.8	5.3	4.6	2.4	1.0	-0.5	-0.5	0.6	0.4
Thailand	-0.9	3.3	3.8	3.0	2.2	1.9	-0.9	0.2	0.7	1.1
Viet Nam	6.9	9.2	18.6	9.1	6.6	4.1	0.6	2.7	3.5	3.5

Source:
ASEAN Secretariat

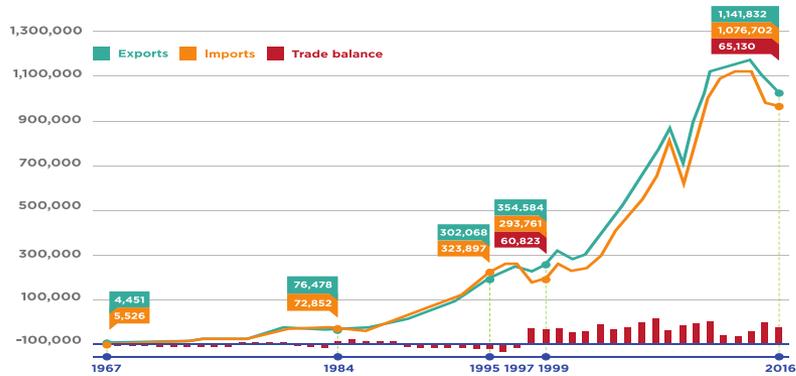
Notes:
- Brunei Darussalam and Malaysia (y-o-y average period) were computed using inflation rate based on the 2010 base year
- Cambodia inflation rate computed using 2006 base year
- Indonesia, Myanmar and Philippines inflation rates were computed using 2012 based year
- Lao PDR, 2006-current using 2006 as the base year
- Singapore and Viet Nam inflation rate were computed using 2014 as base year
- Thailand inflation rate computed using 2015 as base year
- ** not available at the time of publication

ASEAN@50: Its Achievements

(Source: ASEAN Secretariat 2017)



Source: ASEAN Secretariat.
Note: 1967-1983: ASEAN-5; 1984-1994: ASEAN-6; 1995-1996: ASEAN-7; 1997-1998: ASEAN-9; 1999-2016: ASEAN-10.



Source: ASEAN Secretariat.
Note: 1967-1983: ASEAN-5; 1984-1994: ASEAN-6; 1995-1996: ASEAN-7; 1997-1998: ASEAN-9; 1999-2016: ASEAN-10.

	1967	1984	1995	1997	1999	2005	2010	2016
GDP (US\$ at current prices)	22,542	215,522	647,596	715,802	576,519	936,162	1,926,264	2,548,538
GDP annual growth rate (%)	4.3	4.4	8.1	4.5	3.4	5.8	7.5	4.8
Share of ASEAN in the world GDP (% based on \$ PPP)	3.3%	3.6%	5.1%	5.3%	4.8%	5.2%	5.6%	6.2%
GDP per capita (US\$ at current prices)	122	765	1,556	1,462	1,135	1,701	3,268	4,021

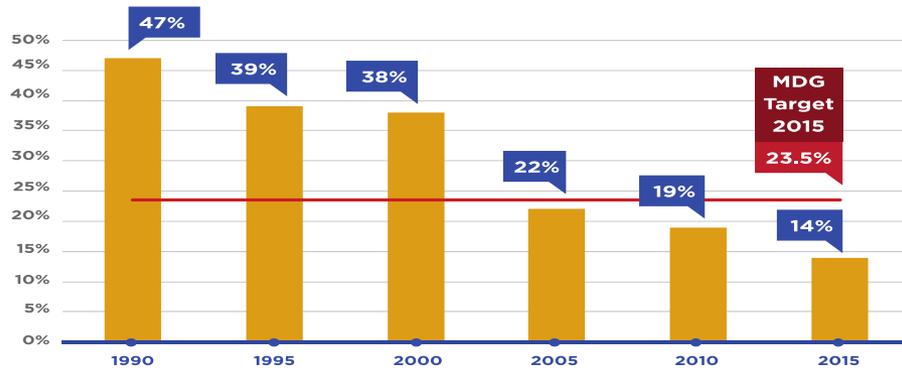
Source: ASEAN Secretariat.
Note: 1967-1983: ASEAN-5; 1984-1994: ASEAN-6; 1995-1996: ASEAN-7; 1997-1998: ASEAN-9; 1999-2016: ASEAN-10.

*Purchasing power parity (PPP) GDP is used to compare GDP between countries. It creates parity, or equality, between countries by removing the differences in prices. One PPP buys the same of goods/services in all countries. Thus, the use of the PPP eliminates price level differences between countries, allowing a fairer comparison of living standards.

ASEAN@50: Its Achievements

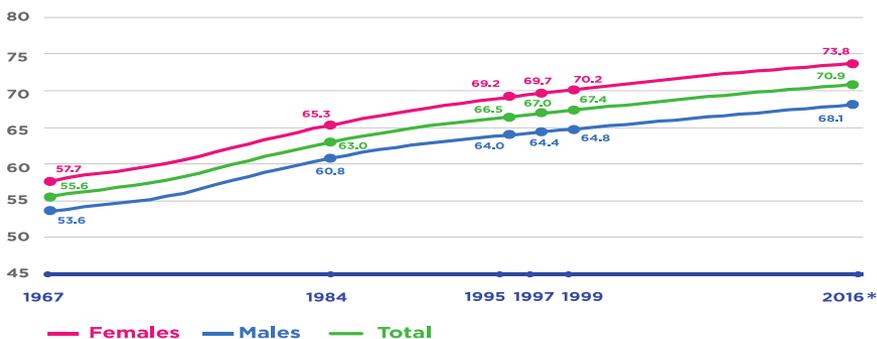
(Source: ASEAN Secretariat 2017)

Figure 2.7. Poverty rate in ASEAN (% of population living with less than \$1.25 PPP per day)



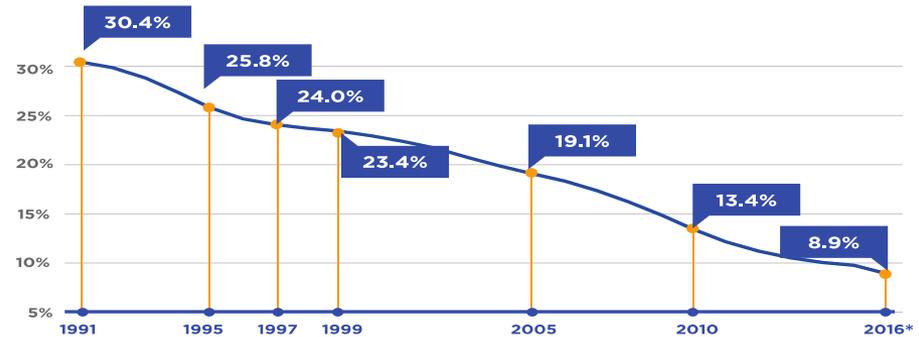
Source: ASEAN Secretariat.
Note: 1990-2015: ASEAN-10 without Brunei Darussalam and Singapore (not applicable) and Malaysia and Myanmar (not available).

Figure 2.9. Evolution of life expectancy in ASEAN (years)



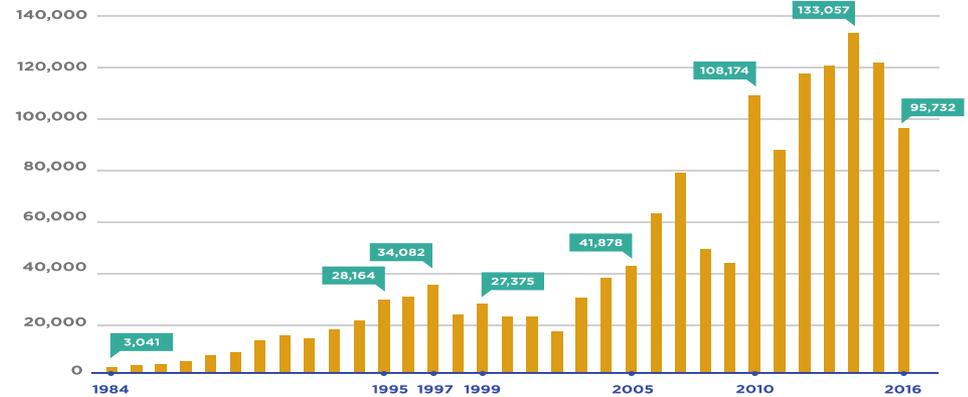
Source: ASEAN Secretariat.
Note: 1967-2016: ASEAN-10. *: Estimation.

Figure 2.8. Evolution of the prevalence of undernourishment in ASEAN (% of population)



Source: ASEAN Secretariat.
Note: 1991-2016: ASEAN-10 without Singapore. *: Estimation.

Figure 1.8. Evolution of FDI net inflows to ASEAN (US\$ million)



Source: ASEAN Secretariat.
Note: 1984-1994: ASEAN-6 without Brunei Darussalam; 1995-1996: ASEAN-7; 1997-1998: ASEAN-9; 1999-2016: ASEAN-10. 2016 data: preliminary.

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 ¹ %		Share of debt to GDP, 2013 %		Inflation rate, 2013 GDP deflator, %	
United States	16.8	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	2.3	United States	104.5	Brazil	6.5
Germany	3.6	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	2.2	United Kingdom	1.5	China	1.8	India	66.7	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	46.7	Italy	1.4
India	1.9	Japan	0.8	France	1.6	China	22.4	France	1.1
Canada	1.8	Italy	0.0	ASEAN	1.5	Russia	13.4	Japan	-0.8

¹ Standard deviation of GDP growth rate.

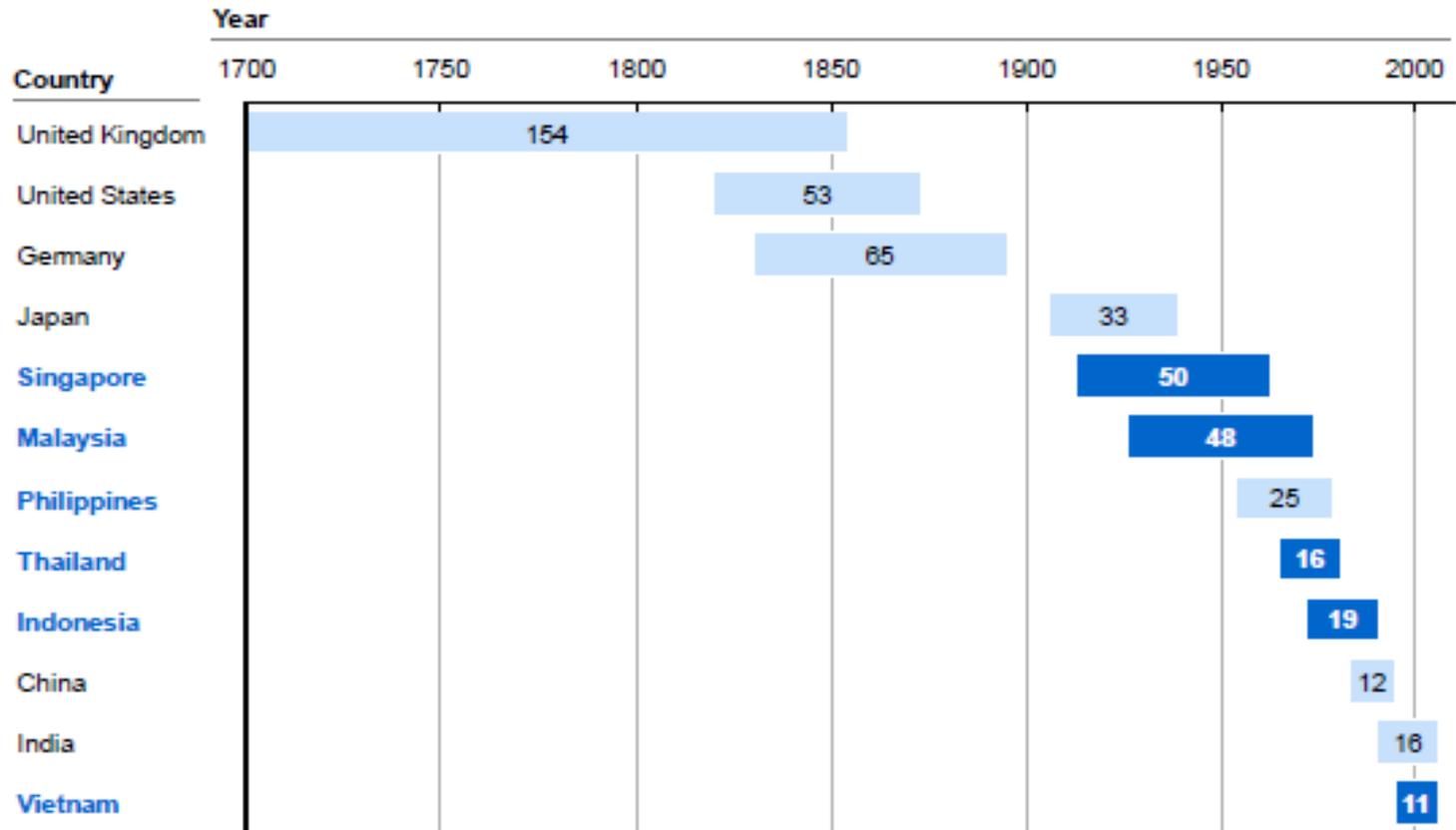
SOURCE: IHS; World economic outlook, International Monetary Fund, April 2014; McKinsey Global Institute analysis

ASEAN Income Growth

Exhibit 2

Incomes in ASEAN countries are rising at unprecedented rates

Years to double per capita GDP¹



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

ASEAN Opportunities & Challenges

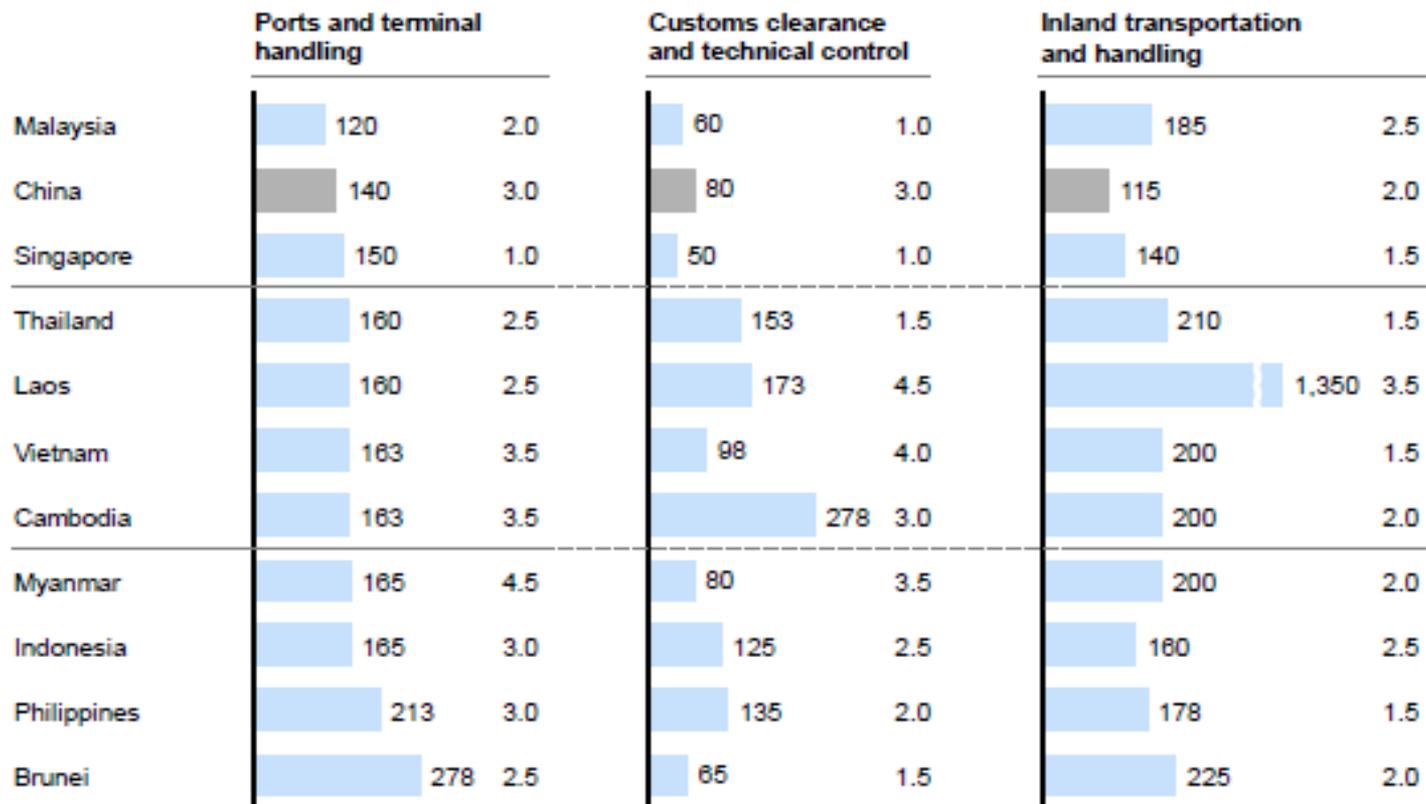


ASEAN Logistics Networks

Exhibit 22

ASEAN's logistics networks are competitive on speed but are often more expensive

Cost, 2014 (\$); days¹



¹ All cost and days units are an average of import and export.

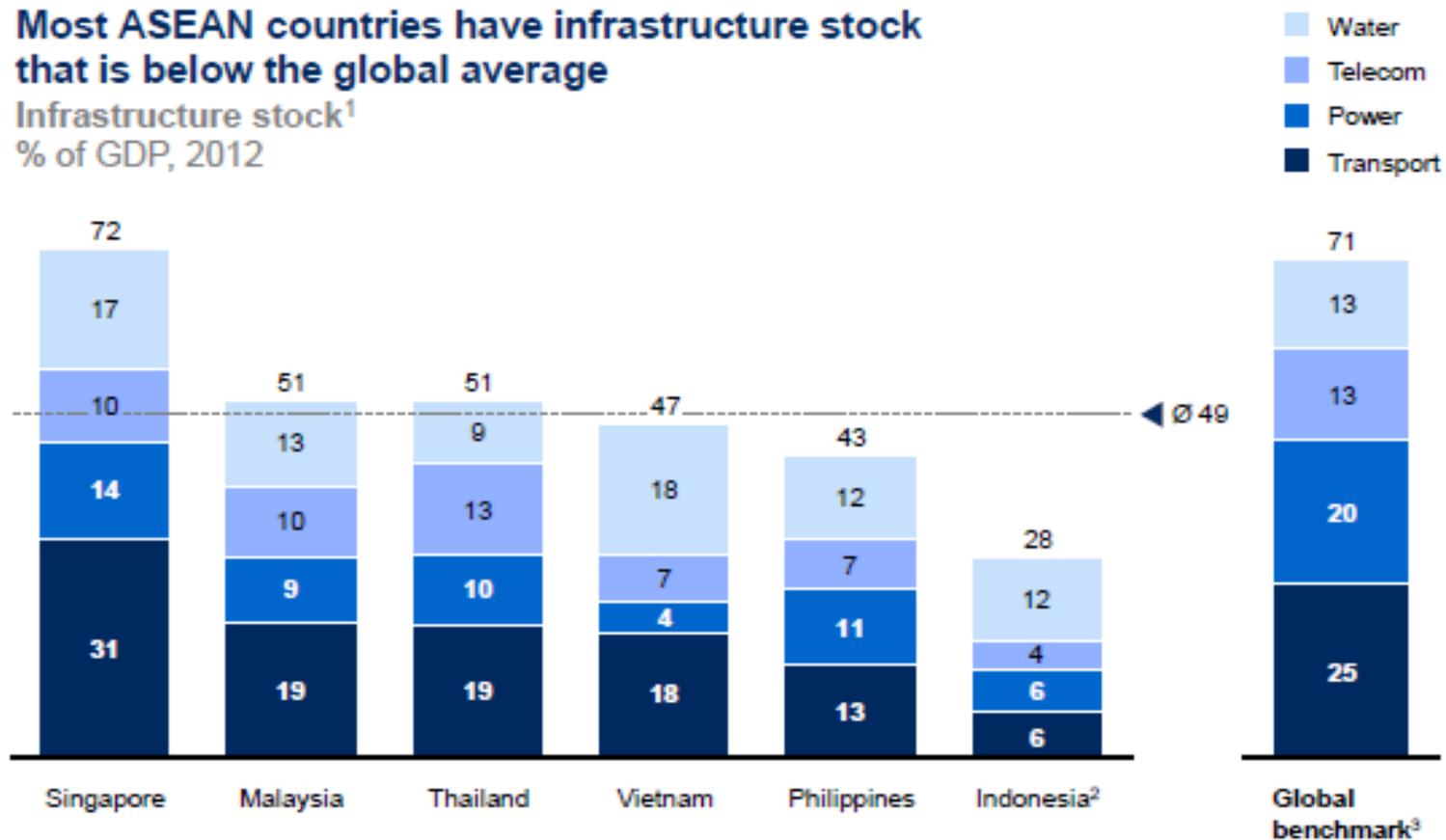
SOURCE: Doing Business Survey, World Bank; McKinsey Global Institute analysis

ASEAN Infrastructure Stock

Exhibit 34

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

Infrastructure stock¹
% of GDP, 2012



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

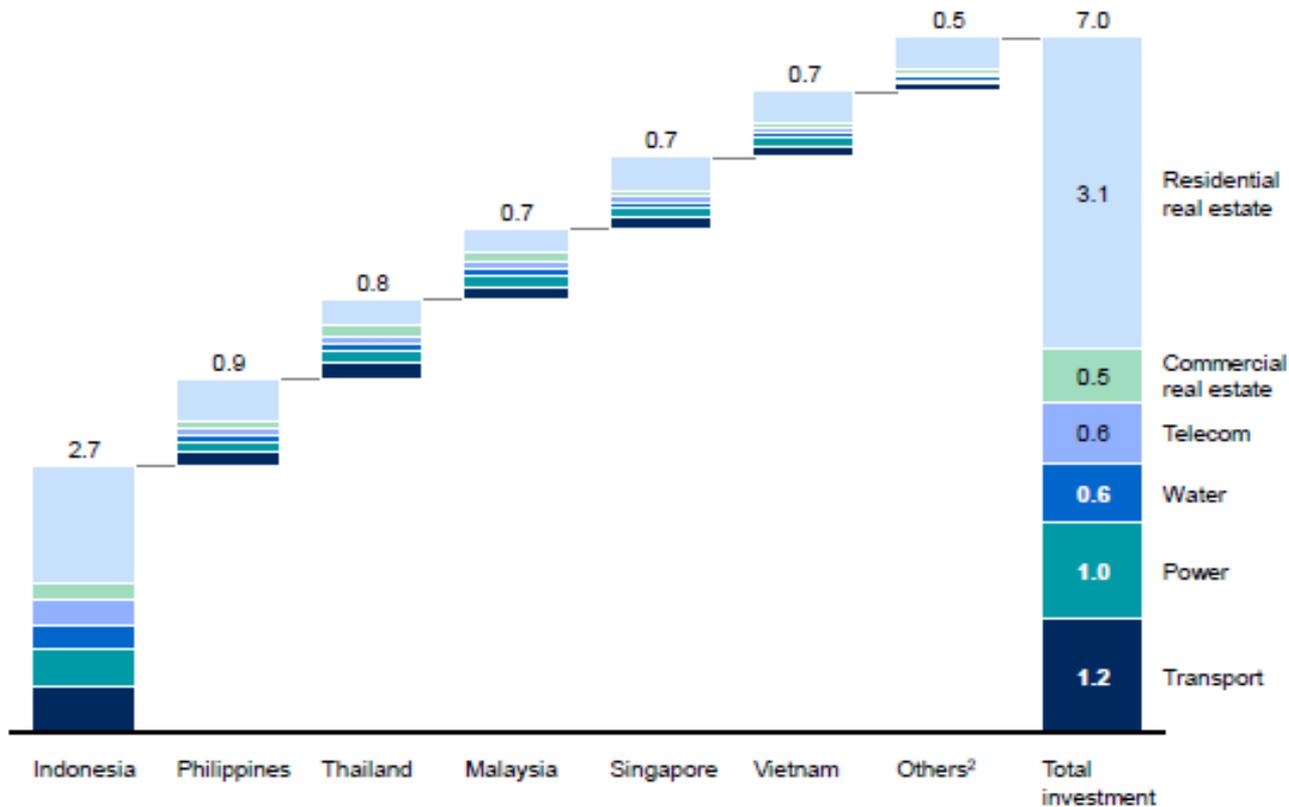
ASEAN Infrastructure Needs

Exhibit 36

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

Required infrastructure and real estate investment, 2014–30¹

\$ trillion



¹ In 2013 real dollar terms.

² Includes Brunei, Cambodia, Laos, and Myanmar.

NOTE: Numbers may not sum due to rounding.

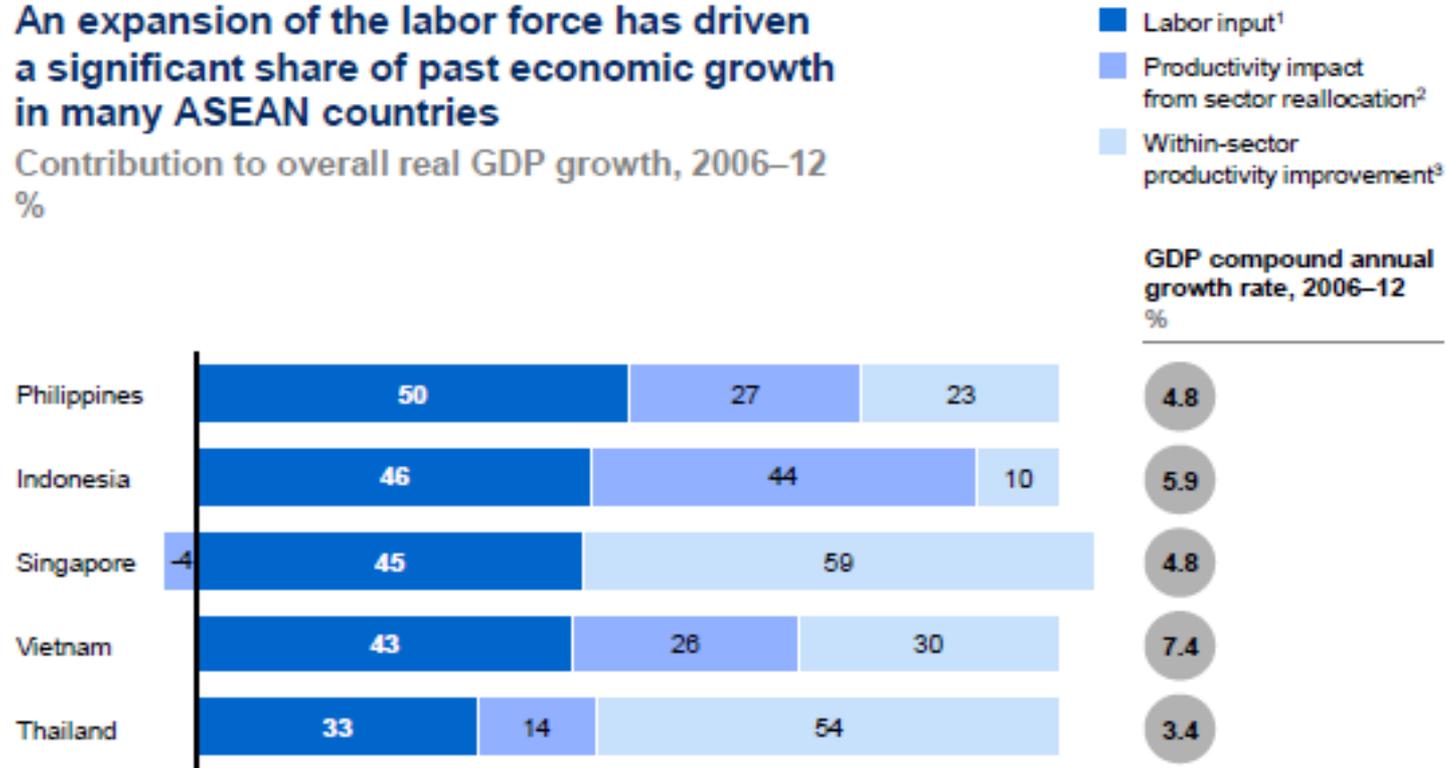
SOURCE: Pike Research; IHS; McKinsey Global Institute analysis

ASEAN Labor Force Expansion

Exhibit 4

An expansion of the labor force has driven a significant share of past economic growth in many ASEAN countries

Contribution to overall real GDP growth, 2006–12
%



1 Reflects changes in employment, labor force participation, and working-age population.

2 Sector reallocation impact reflects the change in employment share between sectors and the differences in their 2006 productivity levels.

3 Reflects the growth impact from productivity improvements within each sector.

NOTE: Some ASEAN countries (Brunei, Cambodia, Laos, and Myanmar) were excluded due to lack of sector-level employment data. Malaysia was excluded as informal labor was included in the latest employment numbers, which skews the results. Numbers may not sum due to rounding.

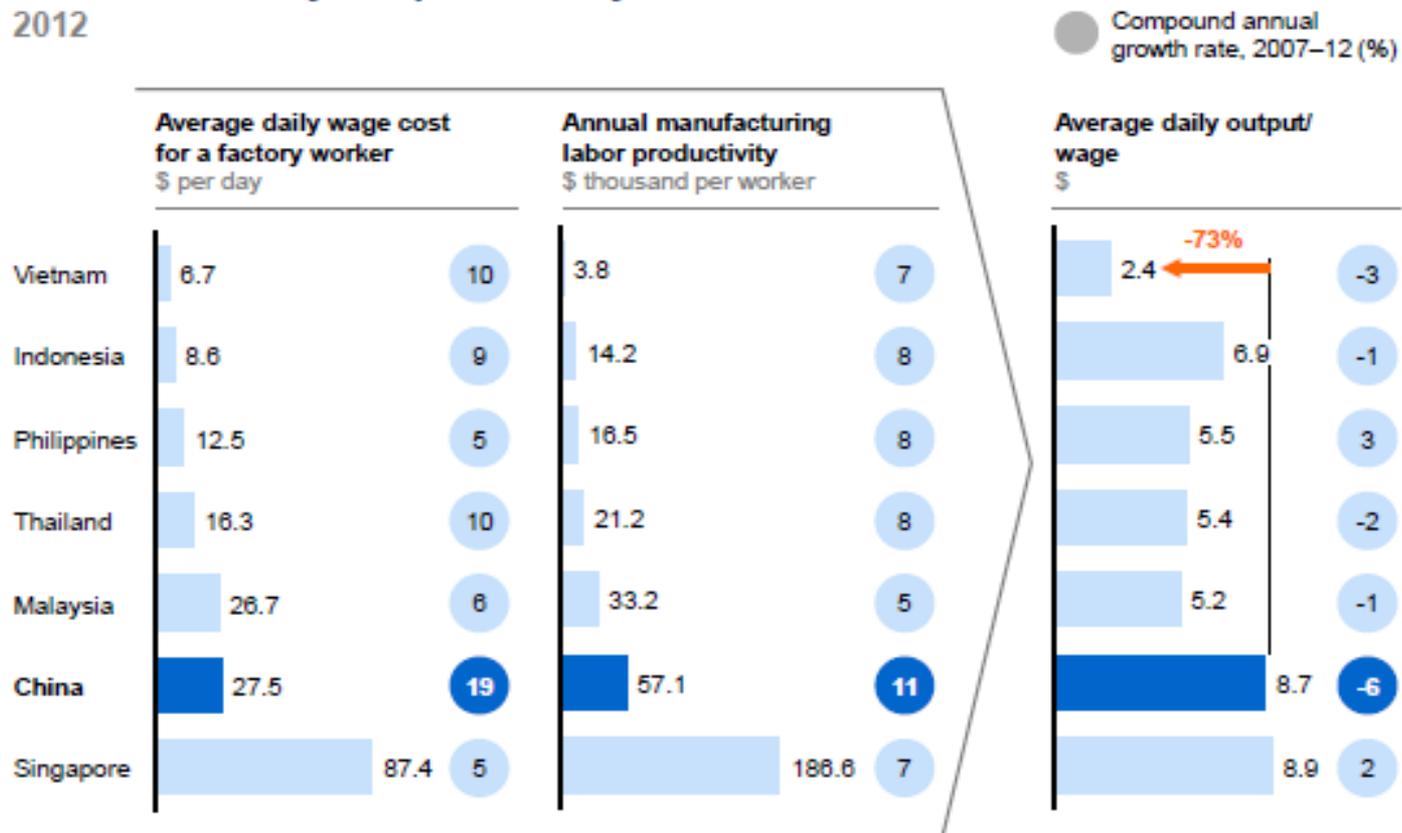
SOURCE: IHS; Statistics Indonesia; Bank of Thailand; Department of Statistics Malaysia; Singapore Statistics; Philippines Statistics Authority; General Statistics Office Vietnam; McKinsey Global Institute analysis

ASEAN Labor Costs

Exhibit E3

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

2012



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

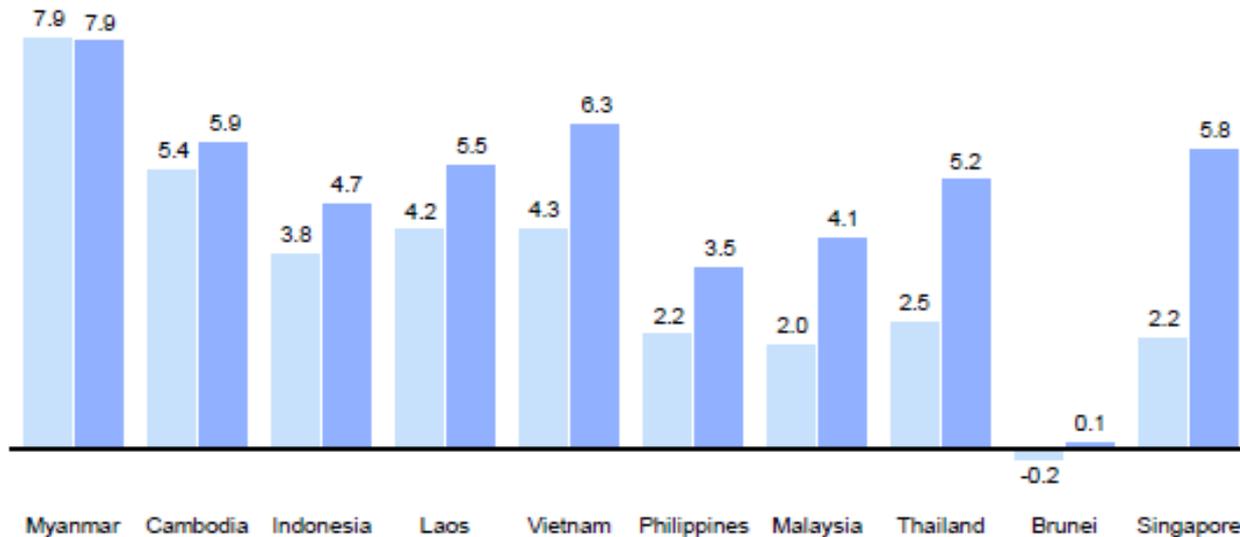
ASEAN Labor Productivity

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 rate¹



Required increase in productivity (%)



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

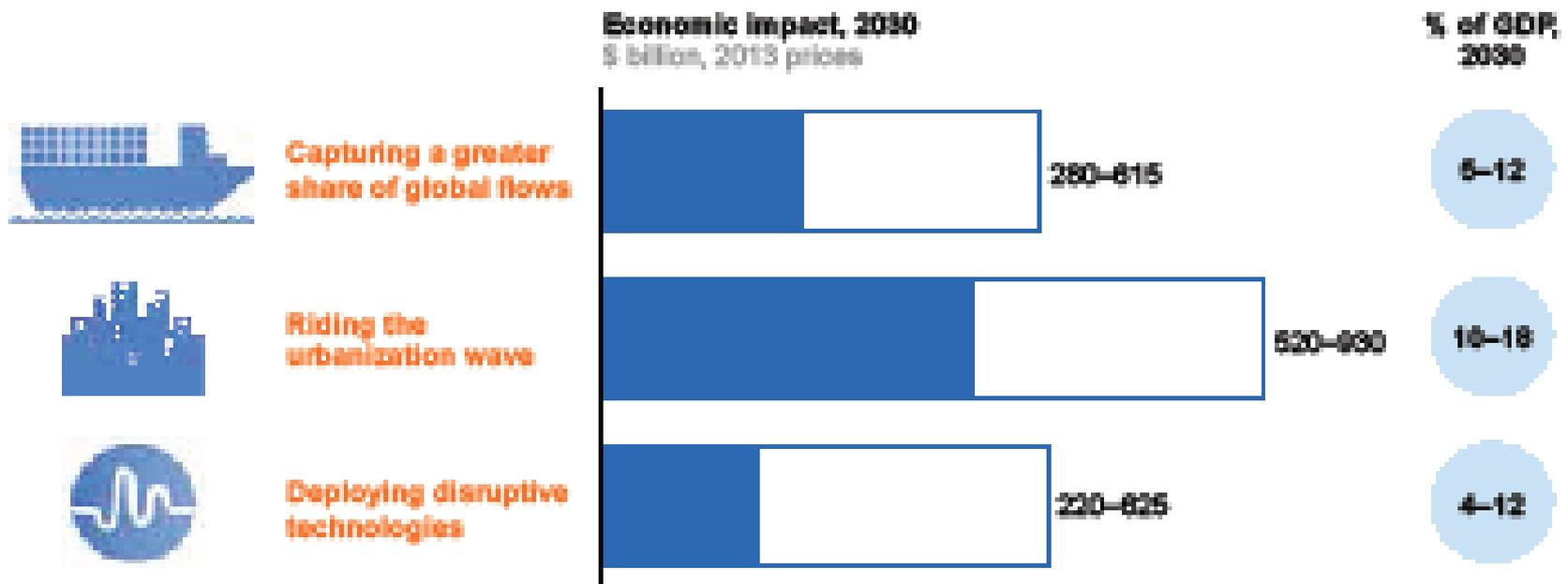
NOTE: Numbers may not sum due to rounding.

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

ASEAN Economic Opportunities

Exhibit E2

Three economic opportunities have the potential for substantial impact across ASEAN by 2030



NOTE: These figures are based on a partial-equilibrium analysis that estimates only first-order effects and therefore cannot be summed to calculate the full economic impact. Numbers are rounded to nearest \$5 billion.

SOURCE: McKinsey Global Institute analysis

ASEAN Exports and Growth

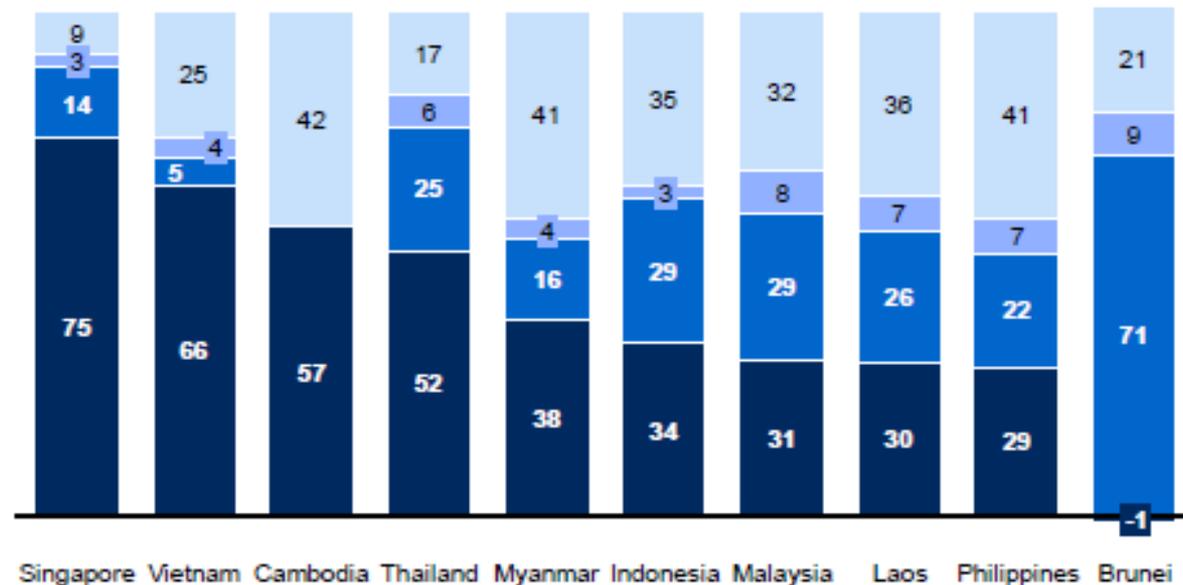
Exhibit 10

The contribution of exports to recent GDP growth varies widely among ASEAN countries

Components of real GDP growth, 2009–13¹

%

- Consumption
- Government
- Investment
- Gross exports



GDP compound annual growth rate, 2009–13 %

6.6

5.9

6.9

4.3

5.0

6.2

5.7

8.4

6.3

1.8

¹ Calculated as growth contribution of components to total growth in consumption, government, investment, and gross exports. Excludes imports.

NOTE: Numbers may not sum due to rounding.

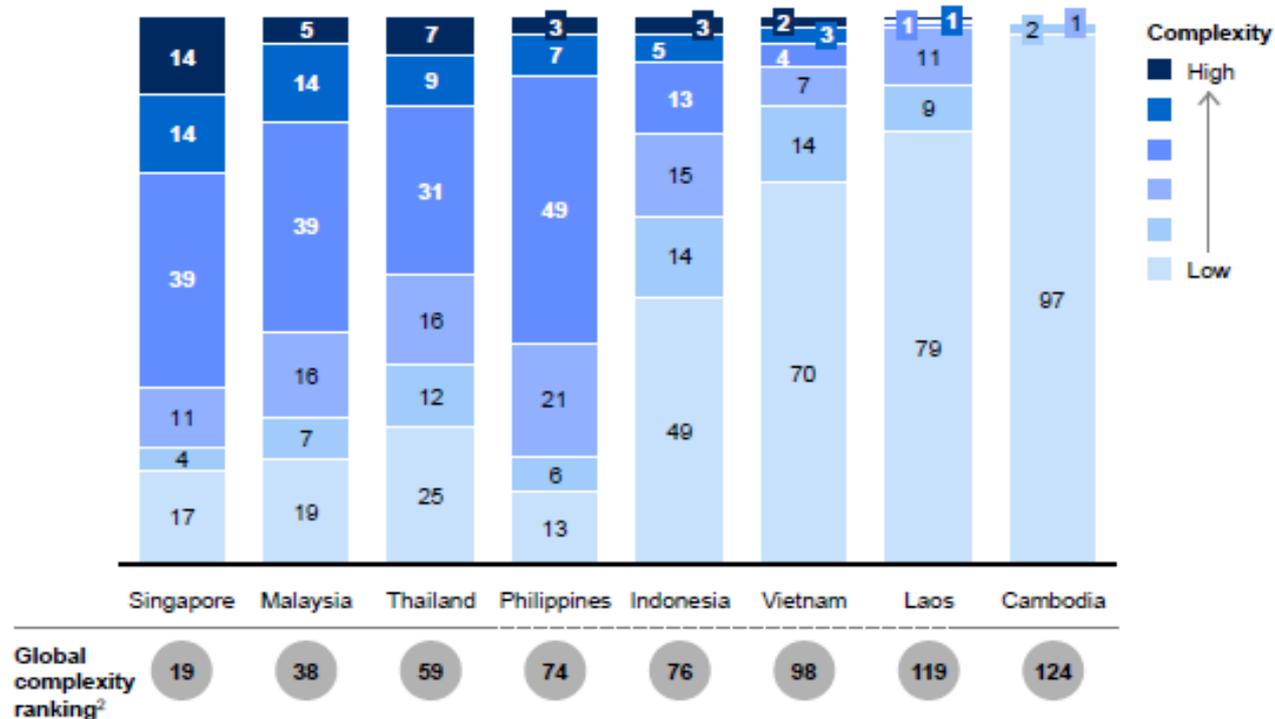
SOURCE: Economist Intelligence Unit; McKinsey Global Institute analysis

ASEAN Complexity of Exports

Exhibit 23

Only Singapore and Malaysia rank among the world's top 50 countries for the economic complexity of their exports

Economic complexity¹ of exports
% distribution across complexity levels



1 Economic complexity considers the country's diversification of exports and the ubiquity of those exports (i.e., the number of countries that export that product). Data are based on averages of 2001–07, but experts suggest complexity distribution in ASEAN countries remains directionally consistent in 2014. The most complex products are in machinery, chemicals, and metals, while the least complex products are raw materials and commodities, wood, textiles, and agricultural products.

2 Ranking out of 124 countries indexed. Brunei and Myanmar not included in index.

NOTE: Numbers may not sum due to rounding.

SOURCE: Jesus Felipe et al., "Product complexity and economic development," in *Structural change and economic dynamics*, 2012; McKinsey Global Institute analysis

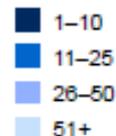
ASEAN Connectivity

Exhibit 9

Five ASEAN countries rank among the world's 50 most connected nations

MGI Connectedness Index and overall flows data, 2012¹
 Rank of participation by flow as measured by flow intensity and share of world total

Connectivity index rank



Rank	Country	Goods	Services	Financial	People (2010)	Data and communication (2013)
1	Germany	3	5	7	5	2
2	Hong Kong, China	1	4	3	14	n/a
3	United States	8	9	5	1	7
4	Singapore	2	3	4	18	5
5	United Kingdom	13	6	9	7	3
6	Netherlands	6	7	15	29	1
7	France	9	10	38	15	4
8	Canada	16	22	13	9	18
=9	Russia	19	30	16	2	21
=9	Italy	11	20	31	16	10
ASEAN²						
4	Singapore	2	3	4	18	5
18	Malaysia	10	23	34	26	32
36	Thailand	12	19	27	94	56
45	Philippines	53	45	47	52	54
48	Vietnam	25	56	41	90	58
56	Indonesia	31	49	39	113	65
91	Cambodia	81	82	59	109	104

¹ Index calculations use migrants data for people flows and cross-border Internet traffic for data and communication flows.

² Brunei, Laos, and Myanmar are not included due to data limitations.

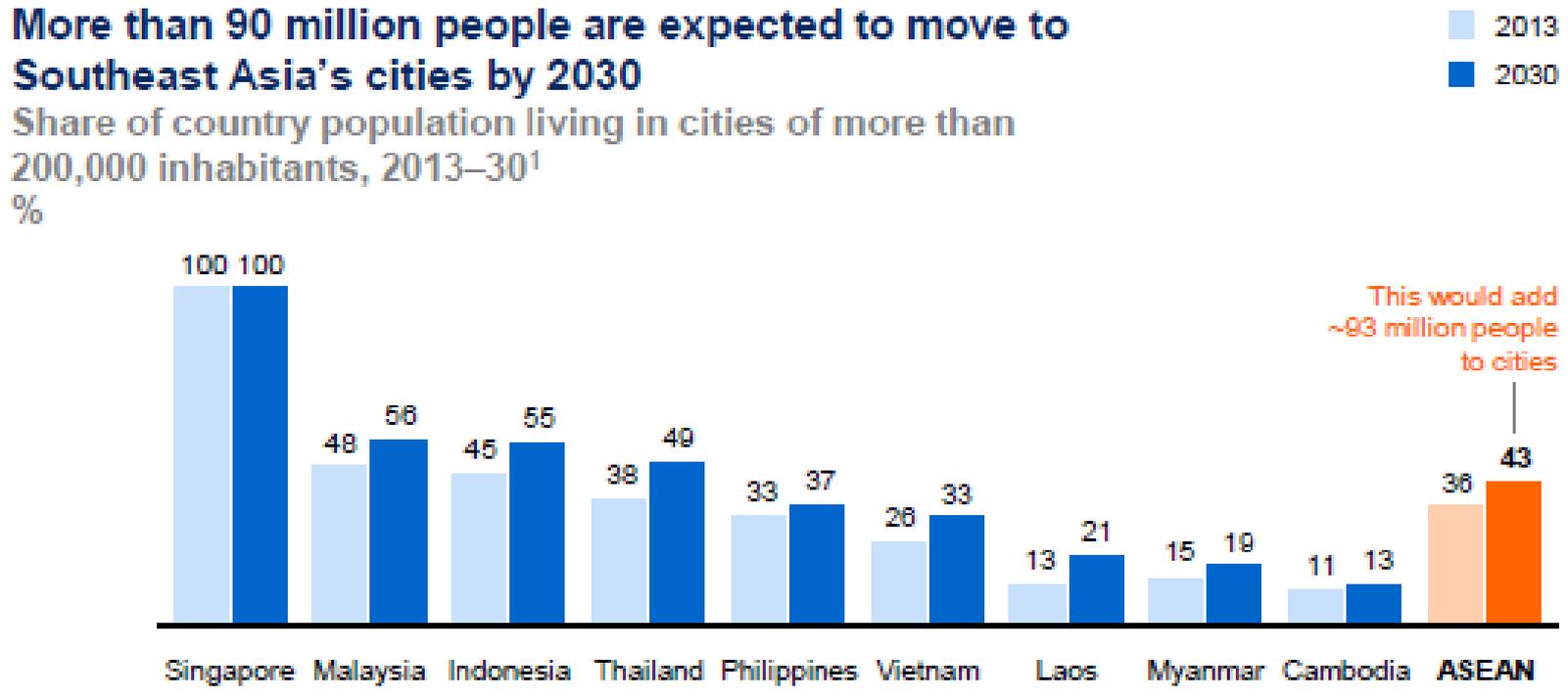
SOURCE: Comtrade; IHS; World Trade Organization; Telegeography; World Bank; McKinsey Global Institute analysis

ASEAN Urbanization (1)

Exhibit 25

More than 90 million people are expected to move to Southeast Asia's cities by 2030

Share of country population living in cities of more than 200,000 inhabitants, 2013–30¹
%



Cities with >200,000 inhabitants in 2013



¹ Brunei not included as the country has no cities with population >200,000.

NOTE: Numbers may not sum due to rounding.

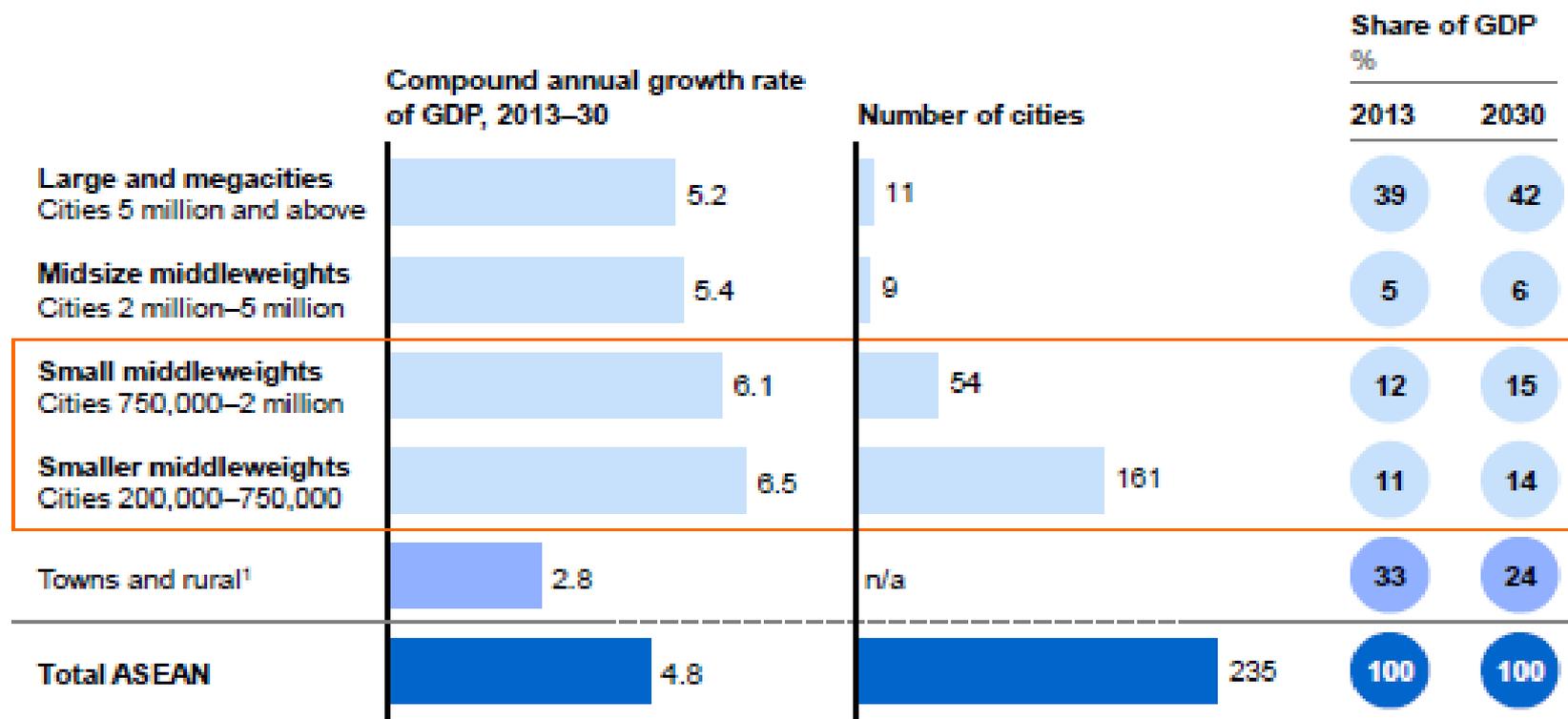
SOURCE: McKinsey Global Institute Cityscope database; national statistics offices; McKinsey Global Institute analysis

ASEAN Urbanization (2)

Exhibit E4

Smaller urban areas are expected to post faster growth than the region's larger cities through 2030

Urban
Rural



¹ Includes cities with fewer than 200,000 inhabitants.

NOTE: Numbers may not sum due to rounding.

SOURCE: McKinsey Global Institute Cityscope database; national statistics offices; McKinsey Global Institute analysis

ASEAN Urbanization (3)

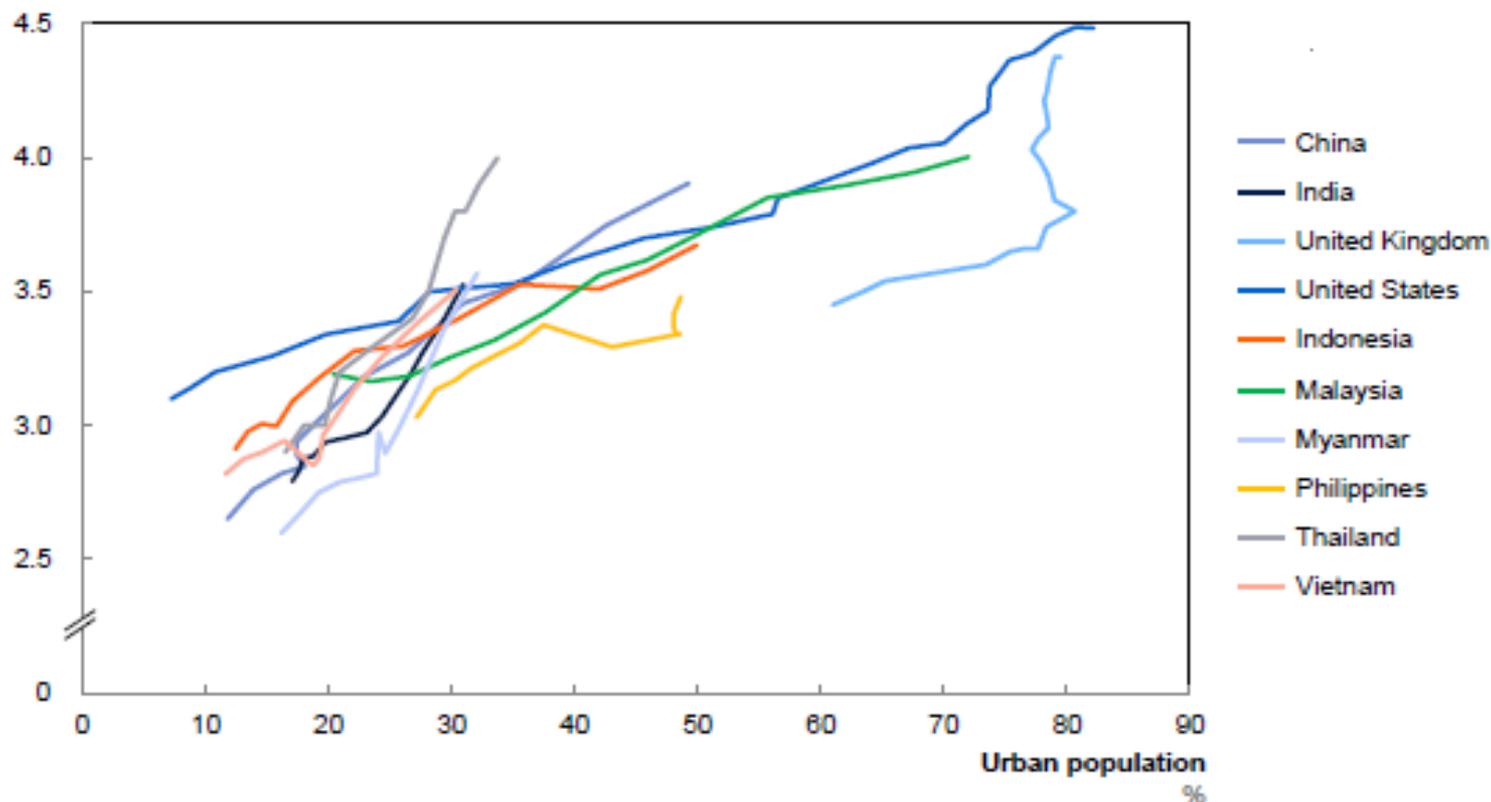
Exhibit 28

Urbanization is associated with rising prosperity

Urban share vs. GDP per capita, 1950–2010

GDP per capita

\$ in 1990 purchasing power parity terms (log scale)



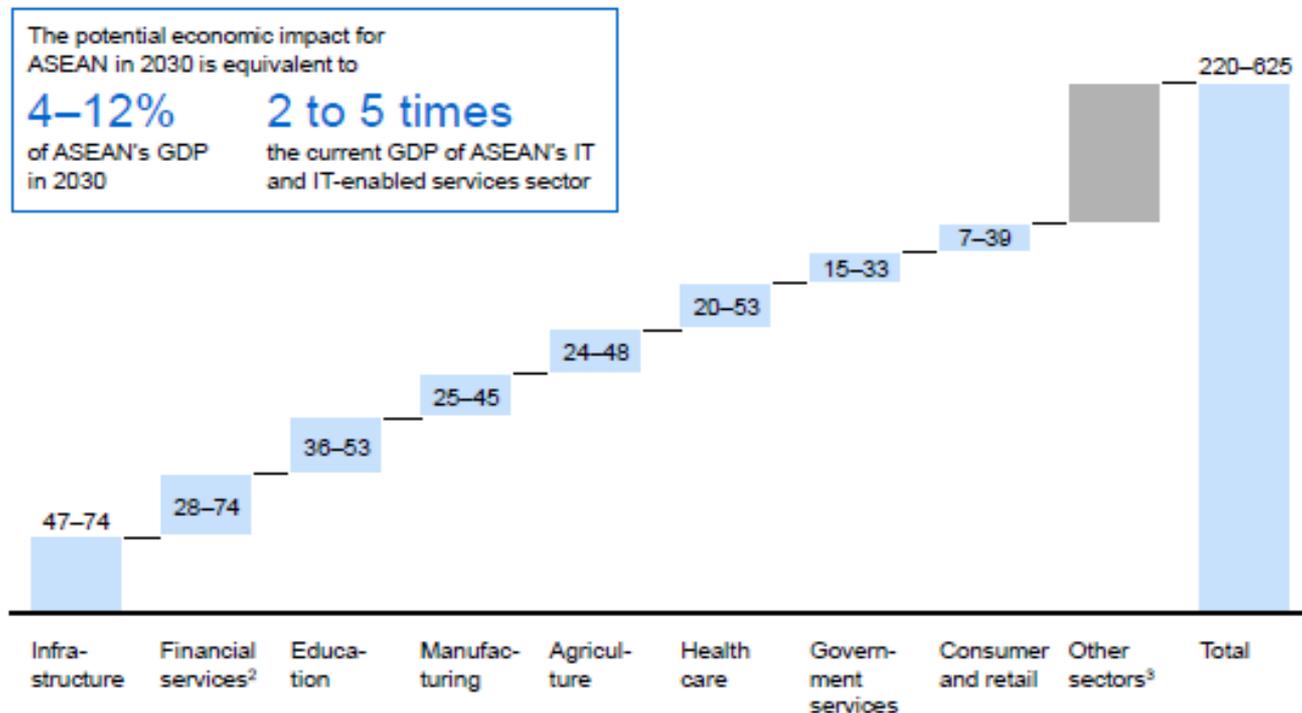
SOURCE: United Nations World Population Division; Angus Maddison database; census reports of England and Wales; Honda in Steckel & Floud, 1997; Bairoch, 1975; McKinsey Global Institute analysis

ASEAN Disruptive Technologies

Exhibit E5

Disruptive technologies have significant potential across key sectors in ASEAN economies

Potential annual economic impact in ASEAN¹
\$ billion, 2030



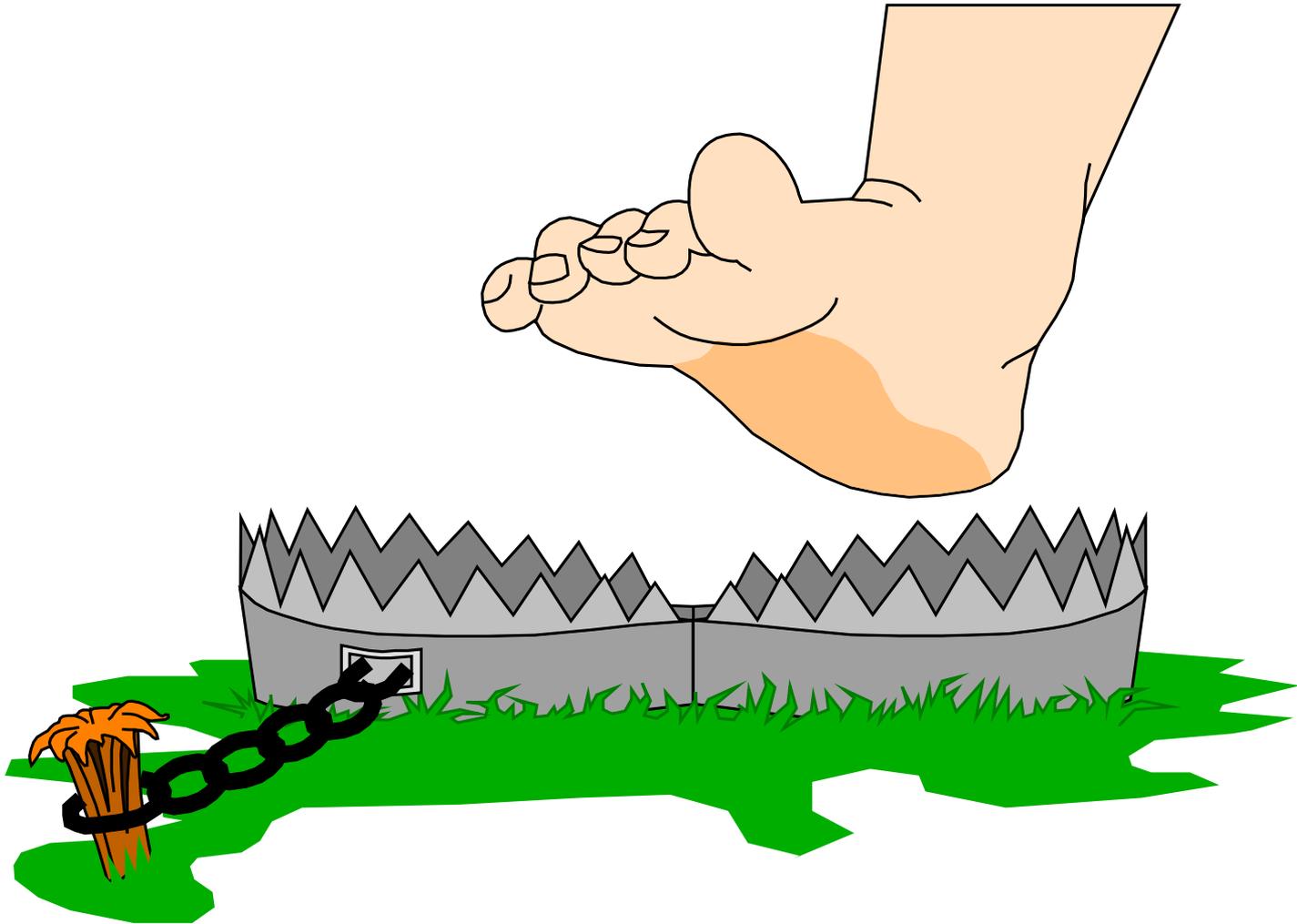
1 These estimates do not represent GDP or market size (revenue), but rather economic potential, including consumer surplus. See the technical appendix for further explanation.

2 Includes \$17 billion–\$52 billion of sector-related impact from sector-related effects such as greater financial inclusion.

3 Additional sectors represent 25–30 percent of ASEAN's total GDP. Impact estimate based on top-down estimate of disruptive technologies.

SOURCE: McKinsey Global Institute analysis

Middle Income Trap



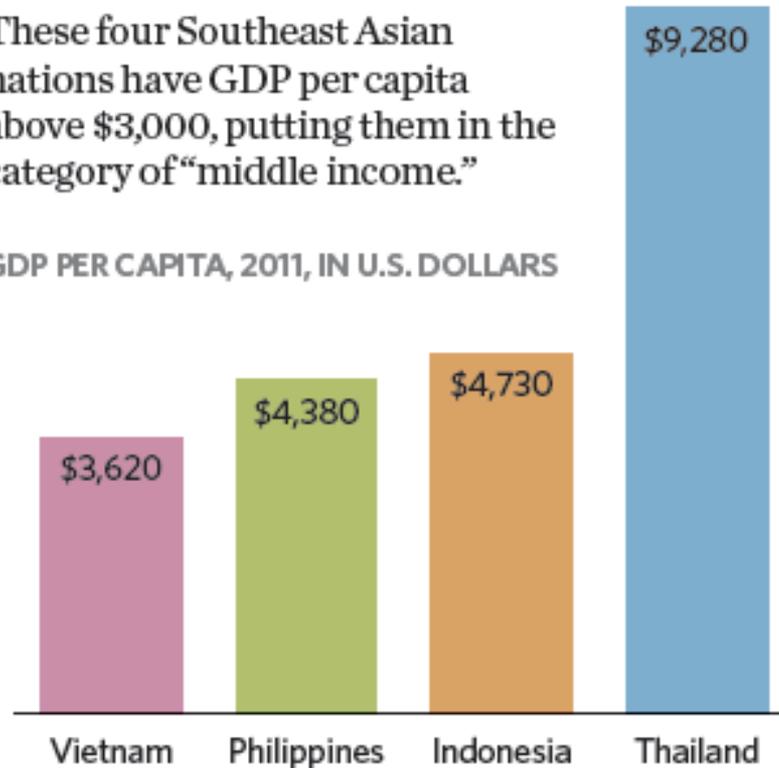
Reaching Middle Income

CHART 1

Reaching Middle Income

These four Southeast Asian nations have GDP per capita above \$3,000, putting them in the category of “middle income.”

GDP PER CAPITA, 2011, IN U.S. DOLLARS



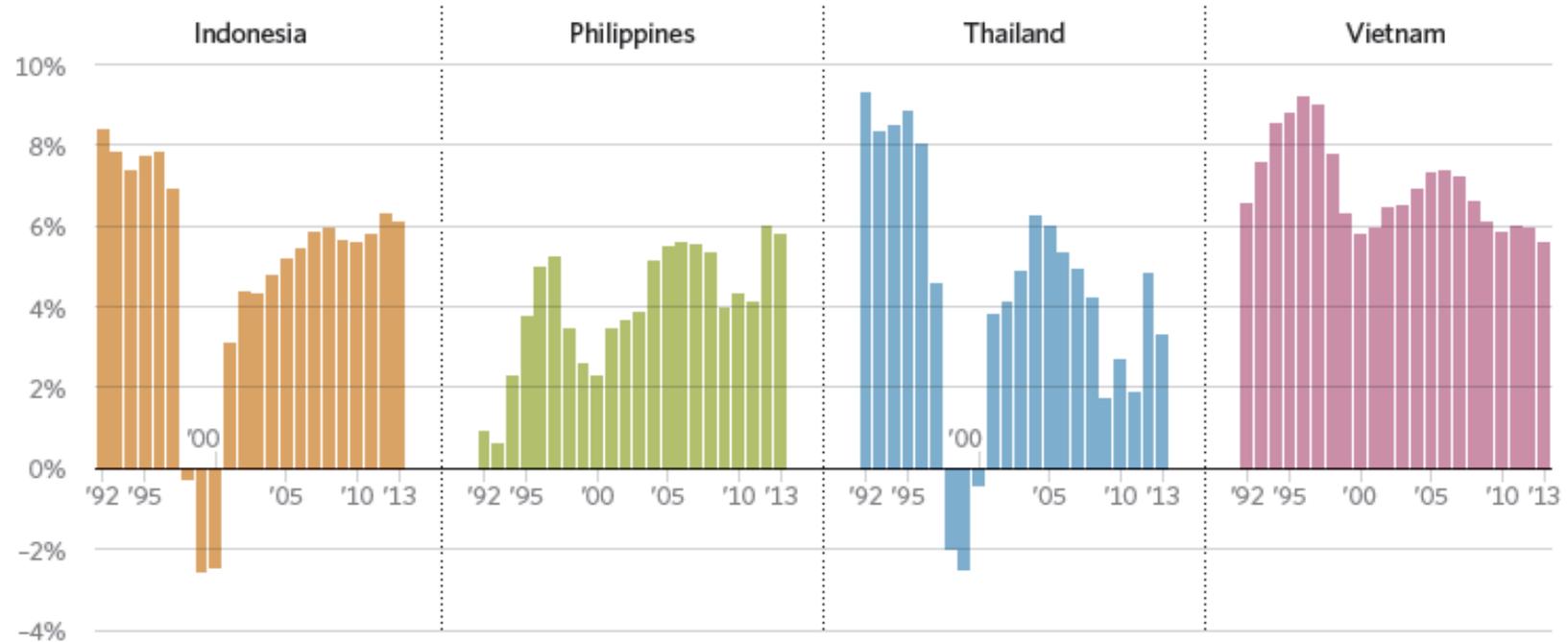
Source: International Monetary Fund, World Economic Outlook Database, October 2013, <https://www.imf.org/external/pubs/ft/weo/2013/02/weodata/index.aspx> (accessed July 1, 2014).

Economic Growth for Middle-Income ASEAN Nations

CHART 2

Economic Growth for Middle-Income Nations in Southeast Asia

PERCENTAGE CHANGE IN REAL GDP, THREE-YEAR MOVING AVERAGE



Source: World Bank, "GDP Growth (Annual %)," <http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG> (accessed July 1, 2014).

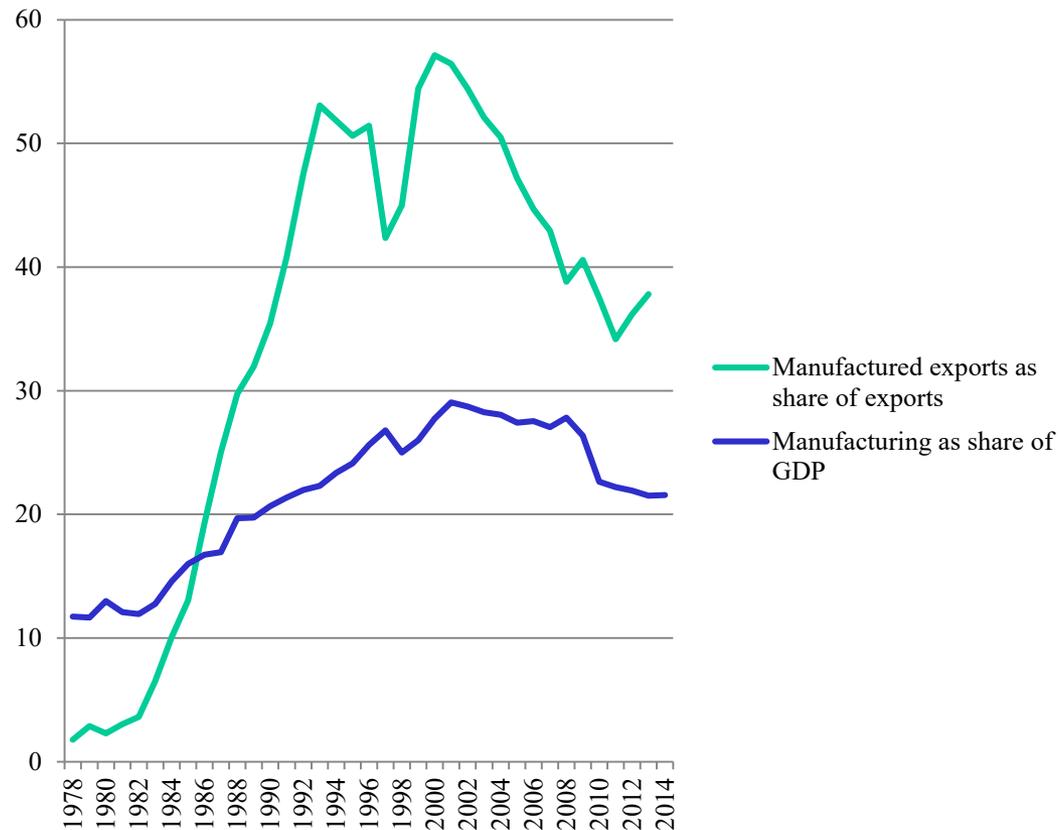
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Growth Rates of GDP Per Capita (in %)

	1961- 1970	1971- 1980	1981- 1990	1991- 2000	2001- 2010	2010- 2014	
China	1	4.3	<u>7.7</u>	<u>9.3</u>	<u>9.8</u>	<u>6.8</u>	
Hong Kong	<u>7.7</u>	<u>6.9</u>	<u>5.4</u>	2.3	3.5	1.7	
Taiwan	7	<u>7.9</u>	<u>6.4</u>	<u>5.7</u>	2.3	4.2	
Japan	<u>9.8</u>	3.3	4	0.9	0.8	0.1	
Republic of Korea	<u>5.7</u>	<u>5.4</u>	<u>7.5</u>	<u>5.1</u>	3.7	2.9	
Indonesia	1.8	<u>5.4</u>	4.4	2.7	4	3.8	
Vietnam	na	na	na	<u>5.9</u>	<u>5.9</u>	4.8	
Philippines	1.8	3.1	-0.9	0.8	2.8	4.3	
Thailand	<u>5.1</u>	4.3	<u>5.9</u>	3.5	3.4	0.4	
Malaysia	3.4	<u>5.3</u>	3.1	4.4	2.7	4.4	
Cambodia	na	na	na	na	<u>6.1</u>	<u>5.1</u>	
Singapore	4.4	<u>7.2</u>	4.9	4.6	3.4	1.6	

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

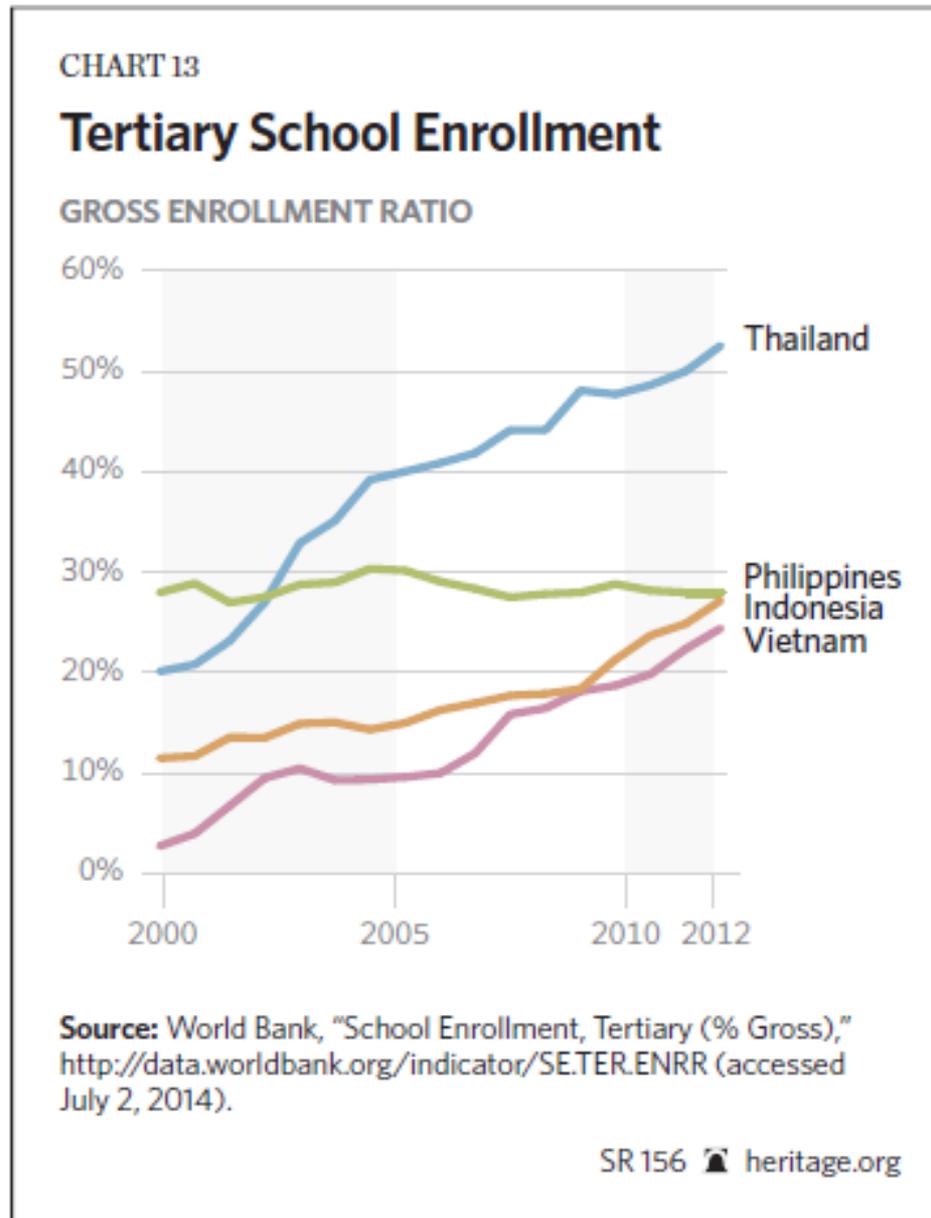
Share of Manufacturing in Exports and GDP (1978-2014)



Secondary School Enrollment (as % of relevant age cohort)

	1960	1975
Burma	10	26
Cambodia	3	9
S. Korea	27	59
Philippines	26	56
Taiwan	37	
Indonesia	6	18
Thailand	8	25
Malaysia	19	41
Hong Kong	24	69
Singapore	32	53
Vietnam	n.a.	2*
Japan	74	95
United States	64	91

Tertiary School Enrollment



Indonesia Labor Force Quality

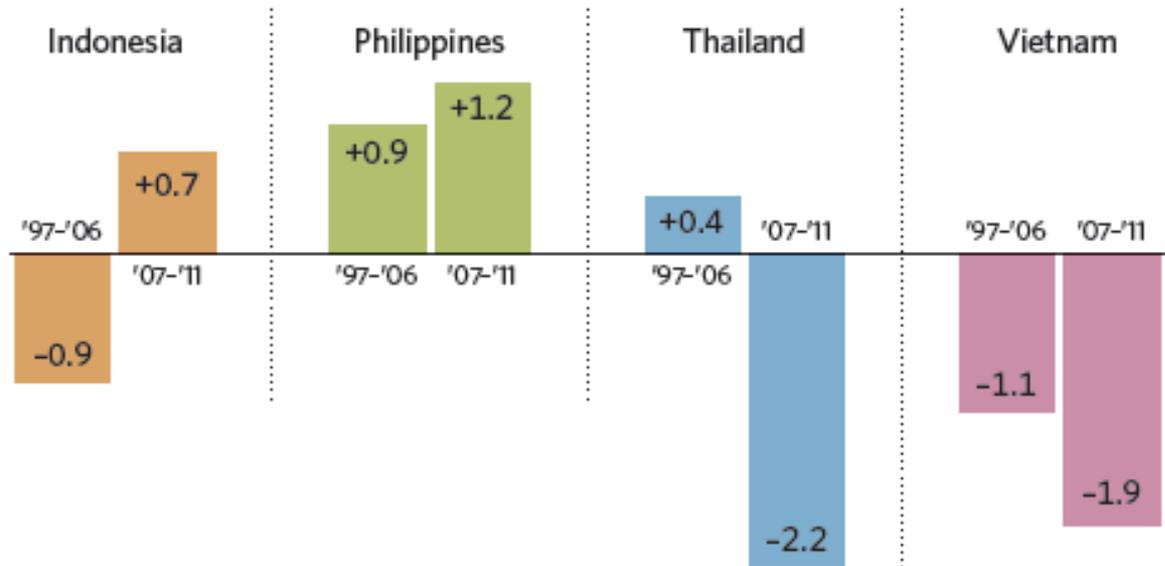
- Share of workers with middle school graduation or less fell from 78% in 2000 to 65% in 2014
- PISA scores are very low in math, science, reading (75% to 80% of average)
- Share of those with “regular employment” rose from 33% in 2000 to 37% in 2014 – most are casual, temporary or family/unpaid workers

Total Factor Productivity

CHART 14

Total Factor Productivity

AVERAGE ANNUAL PERCENTAGE CHANGE, 1997-2006 AND 2007-2011



Source: Conference Board, Total Economy Database, Growth Accounting and Total Factor Productivity, 1990-2013, <https://www.conference-board.org/data/economydatabase/> (accessed July 2, 2014).

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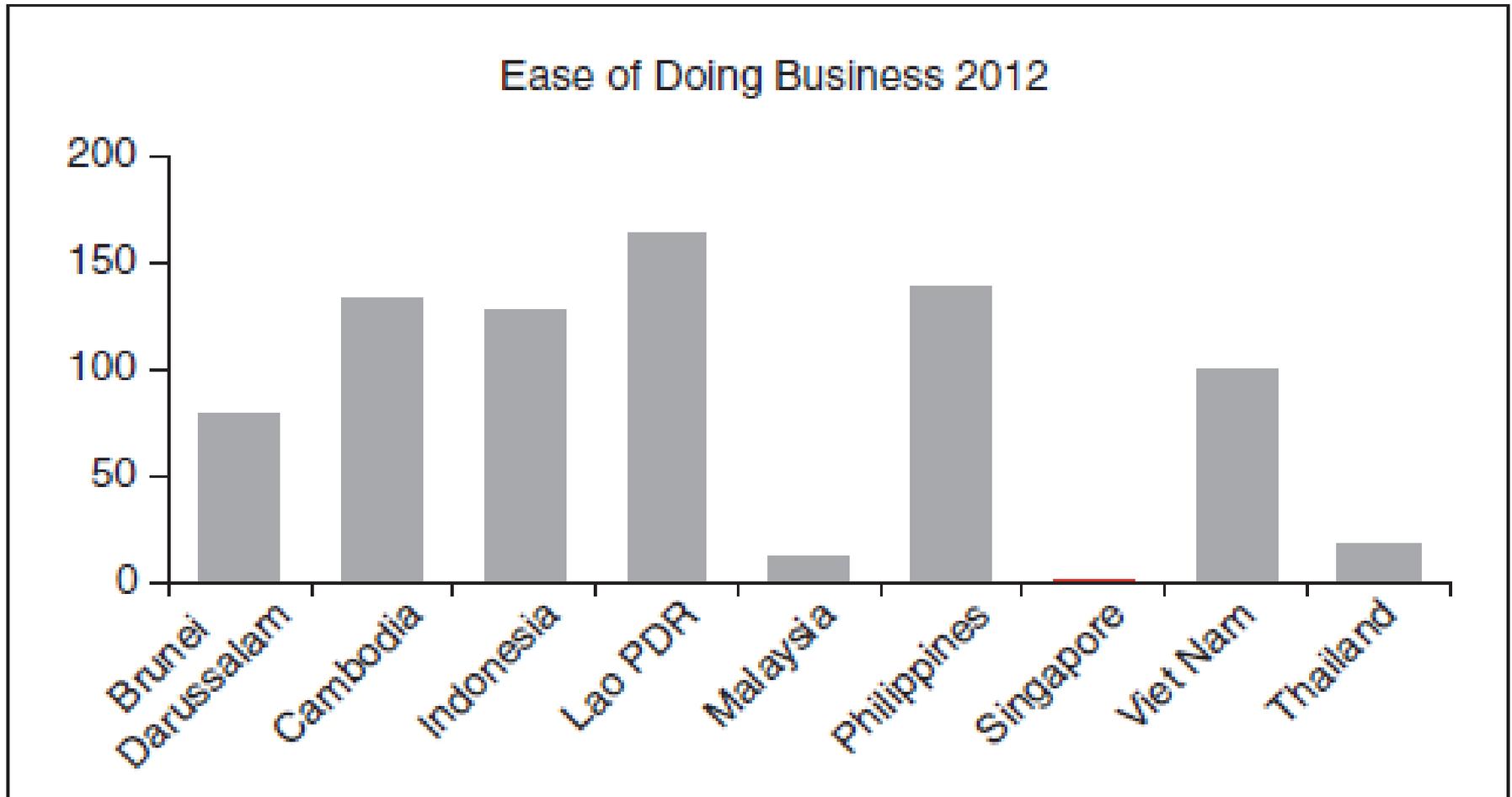
Logistics Performance Index

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

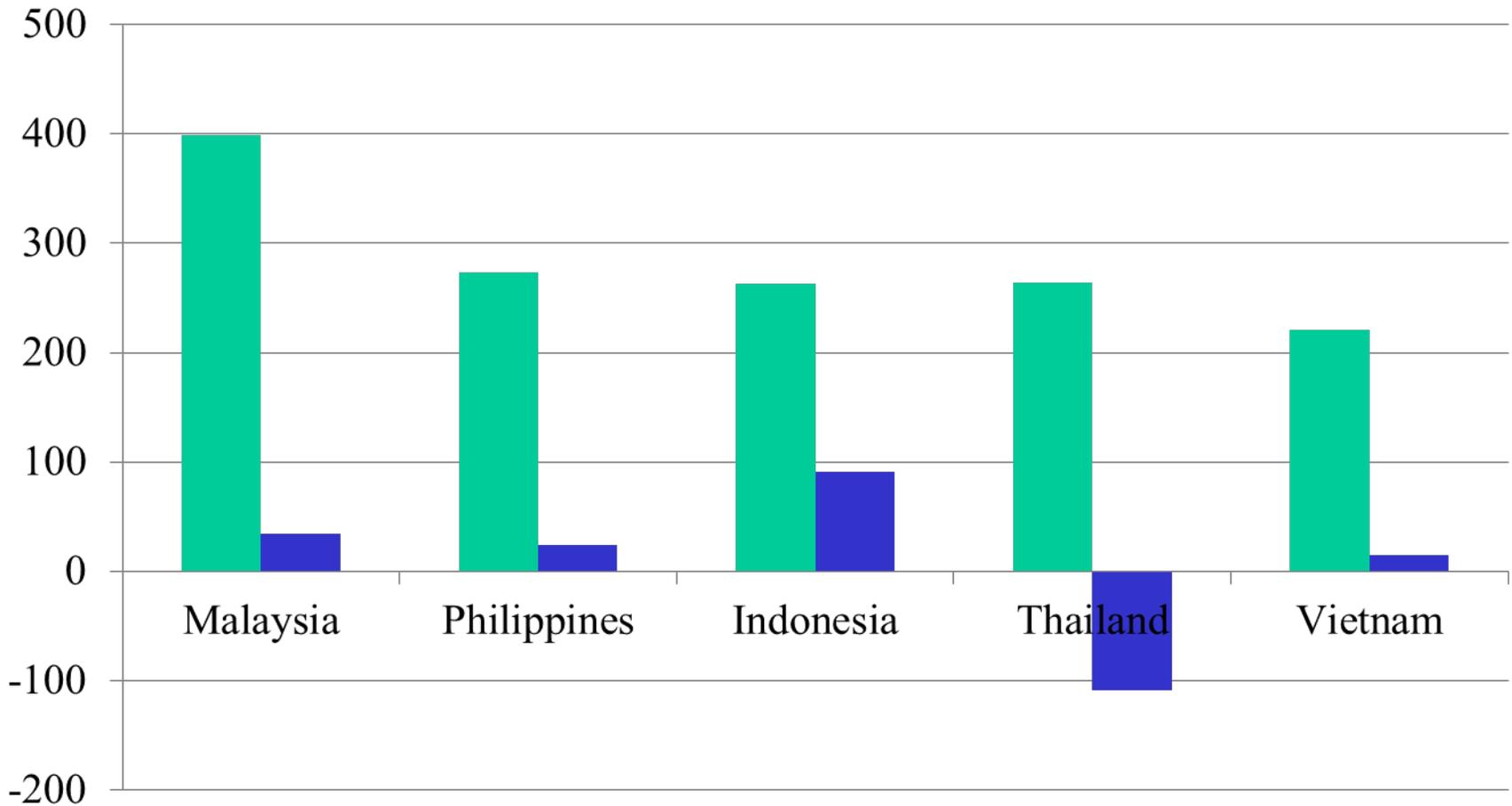
Source: <<http://go.worldbank.org/88X6PU5GV0>>.

Ease of Doing Business



Source: World Bank and The Heritage Foundation.

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



ASEAN Economic Community



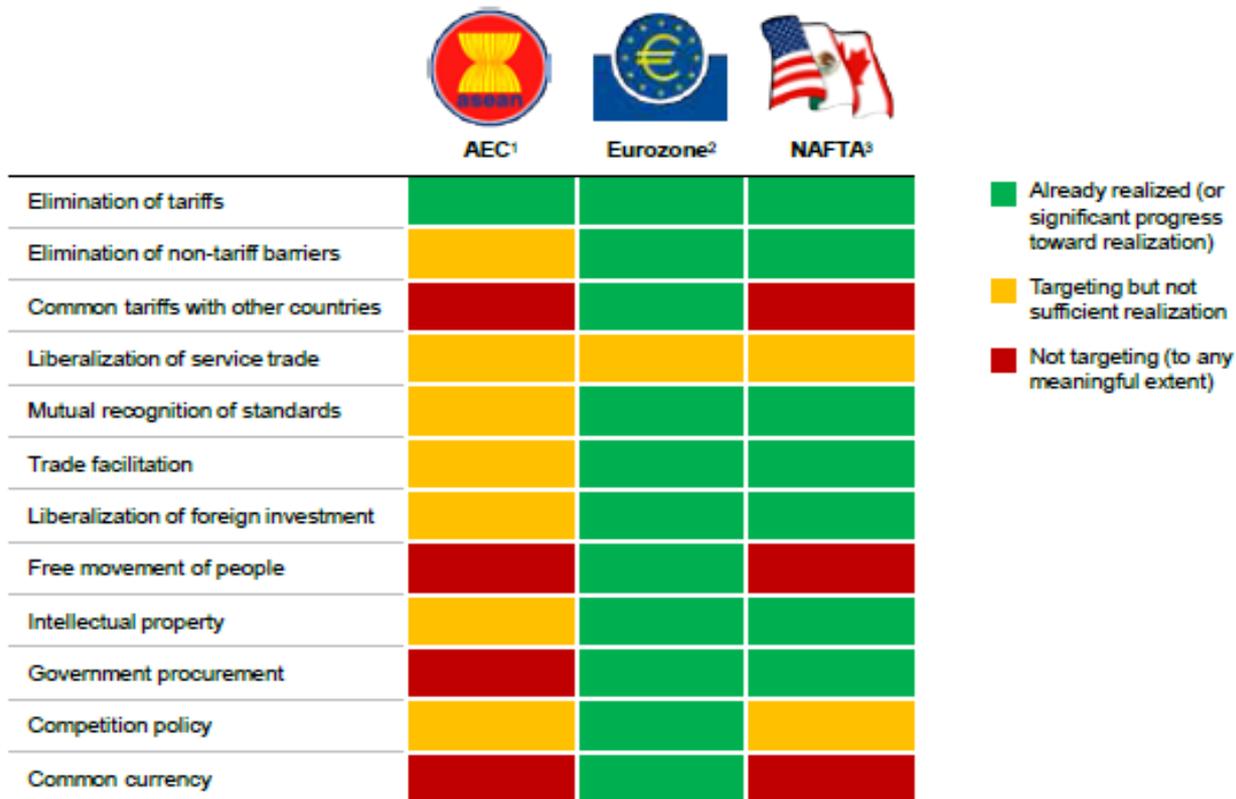
The Fundamental Dilemma

- ASEAN Dream
 - Motto: One Vision, One Identity, One Community
 - 2020: Year of ASEAN Identity
 - Philosophy: Collective strength, integration for critical mass with synergies and complementarities
- ASEAN Counter-Tendencies
 - Conflicting political and security interests
 - Competing financial and economic interests
 - Divergent resources and capabilities

ASEAN vs. Eurozone and NAFTA

Exhibit 12

The ASEAN Economic Community (AEC) differs from other regional economic cooperation agreements



1 The AEC comprises the 10 ASEAN countries: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.

2 Refers to the monetary union created in 2002. Includes Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, and Spain. A further 10 member countries are in the European Union but do not have the common currency.

3 North American Free Trade Agreement. Comprises Canada, Mexico, and the United States.

SOURCE: Japan External Trade Organization; International Trade Administration, US Department of Commerce; McKinsey Global Institute analysis

ASEAN Trade and Investment

Trade

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam	ASEAN
Total trade in goods (US\$m)	10,728.8	30,190.3	385,534.6	11,389.0	464,821.0	35,991.3	182,607.1	782,656.9	432,977.9	479,806.7	2,816,703.5
- Intra-ASEAN (%)	29.8	26.5	23.9	60.6	27.2	35.8	21.6	25.6	23.6	11.7	23.0
- Extra-ASEAN (%)	70.2	73.5	76.1	39.4	72.9	64.2	78.4	74.4	76.4	88.3	77.0
- Total exports (US\$m)	6,571.4	12,700.3	180,012.7	5,540.8	247,354.0	16,654.2	67,487.9	411,973.3	241,010.5	242,969.2	1,432,274.3
- Total imports (US\$m)	4,157.4	17,490.0	205,521.9	5,848.1	217,467.1	19,337.1	115,119.2	370,683.6	191,967.4	236,837.4	1,384,429.2
Total trade in services (US\$m)	2,149.1	8,495.4	63,073.2	2,075.6	84,721.9	8,147.0	64,444.5	366,645.1	136,505.0	42,365.8	778,622.6
- Total exports (US\$m)	570.6	5,451.2	28,002.5	921.4	40,164.5	4,690.4	37,468.7	182,500.0	81,331.4	23,754.8	404,855.6
- Total imports (US\$m)	1,578.5	3,044.1	35,070.7	1,154.1	44,557.5	3,456.6	26,975.8	184,145.1	55,173.6	18,611.0	373,767.1

Investment

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam	ASEAN
Total FDI inward flows (US\$m)	503.9	3,102.6	21,979.9	1,319.6	8,071.6	3,554.0	9,802.4	77,630.5	13,248.5	15,500.0	154,713.0
- Intra-ASEAN (%)	12.6	25.4	53.9	15.3	5.9	59.4	10.1	4.4	13.8	18.4	15.7
- Extra-ASEAN (%)	87.4	74.6	46.1	84.7	94.1	40.6	89.9	95.6	86.2	81.6	84.3

Source : ASEAN Secretariat, UNCT

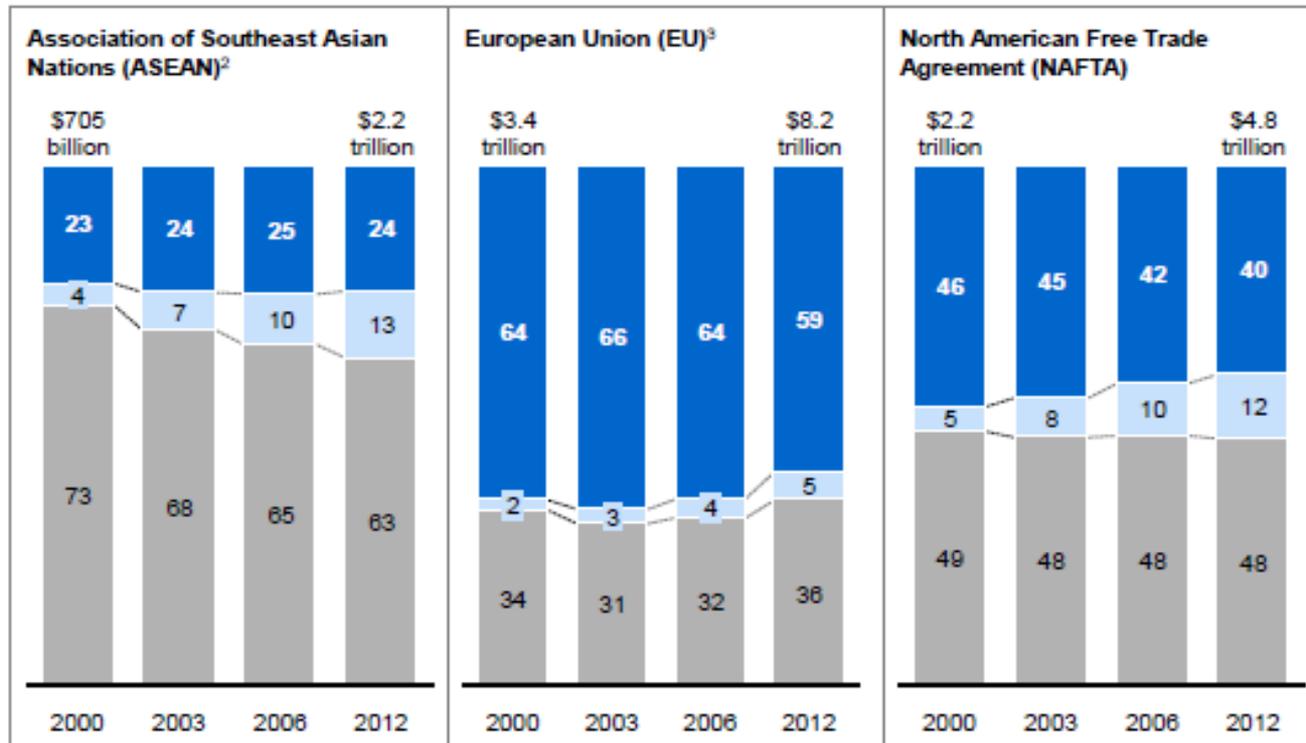
ASEAN Intra-Regional Trade

Exhibit 11

ASEAN's intra-regional trade is much lower than that of other trading blocs

Trade within and outside of trading blocs

Share of total goods trade, %¹



1 The value of total trade calculated as imports into ASEAN from extra-ASEAN plus all exports out of ASEAN (to avoid double counting).

2 ASEAN 10.

3 EU-27.

NOTE: Numbers may not sum due to rounding.

SOURCE: Comtrade; McKinsey Global Institute analysis

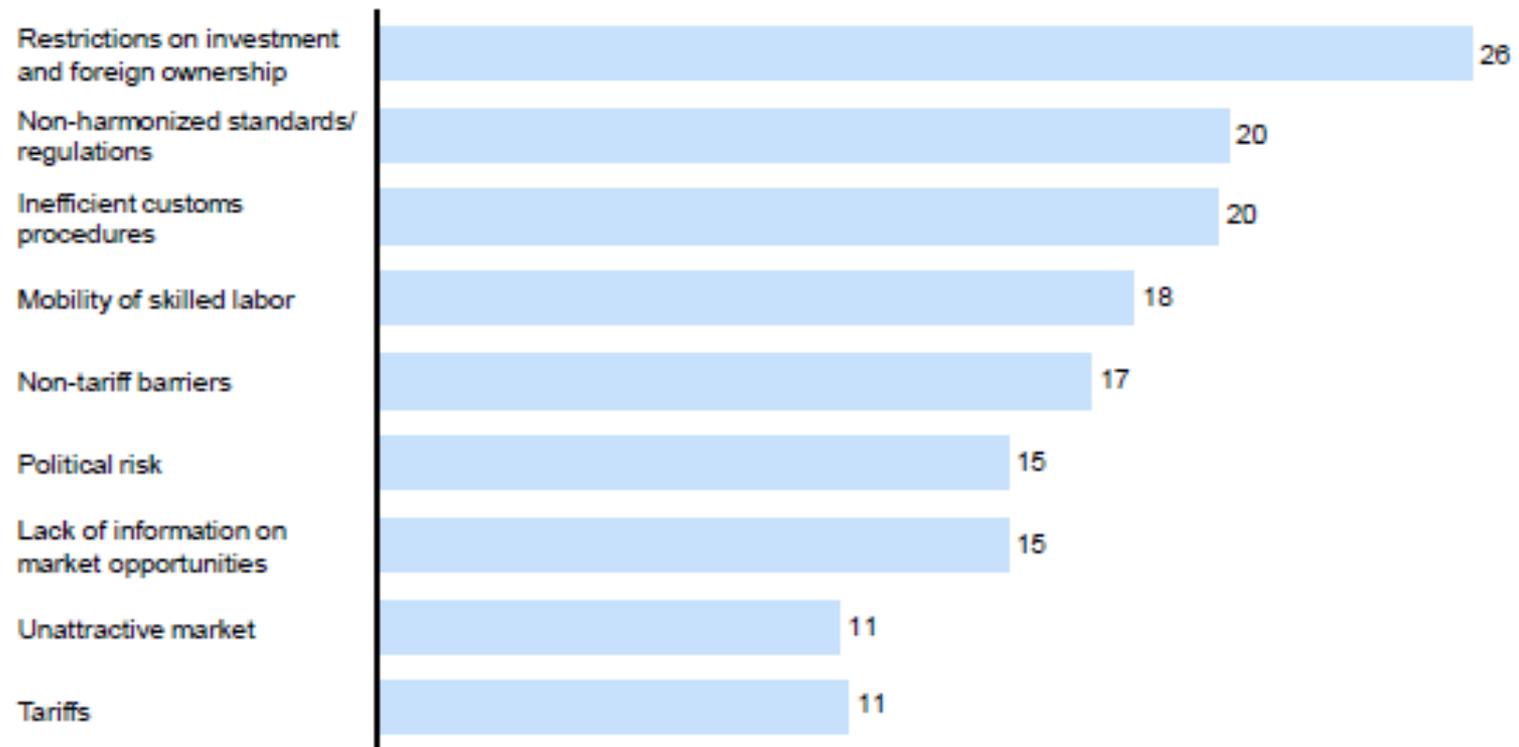
ASEAN Trade Barriers

Exhibit 14

The region's businesses consider liberalizing foreign direct investment, harmonizing standards, and improving customs efficiency to be priorities

Barriers to trading in ASEAN

% of survey respondents who identified each issue as "a major barrier"¹



¹ Sample size of 96 respondents.

SOURCE: McKinsey Global Institute analysis

Non-Tariff Measures

State Measures by Type, ASEAN-6

	Indonesia	Malaysia	Philippines	Singapore	Thailand	Viet Nam
Total number of measures	57	8	11	7	18	26
Number of measures classified (green)	9	2	7	0	9	11
Number of measures in database classified (amber)	18	3	3	3	5	0
Number of measures in database classified (red)	30	3	1	4	4	15
Number of tariff lines affected by red measures	388	29	1	0	28	927

Notes:

Green — indicates the measure is either:

- Announced and involves liberalizing on a non-discriminatory (i.e., MFN) basis; or
- The measure has been implemented and is found (upon investigation) not to be discriminatory; or
- The measure has been implemented, involves no further discrimination, and improves the transparency of a jurisdiction's trade-related policies.

Red — indicates the measure is implemented and almost certainly discriminates against commercial interests.

Amber — indicates the measure is either:

- Implemented and may involved discrimination against foreign commercial interests; or
- Announced or under consideration and would (if implemented) almost certainly involve discrimination against foreign interests.

Source: <www.globaltradealert.org> (downloaded 10 March 2012).

Share of Imports with NTMs

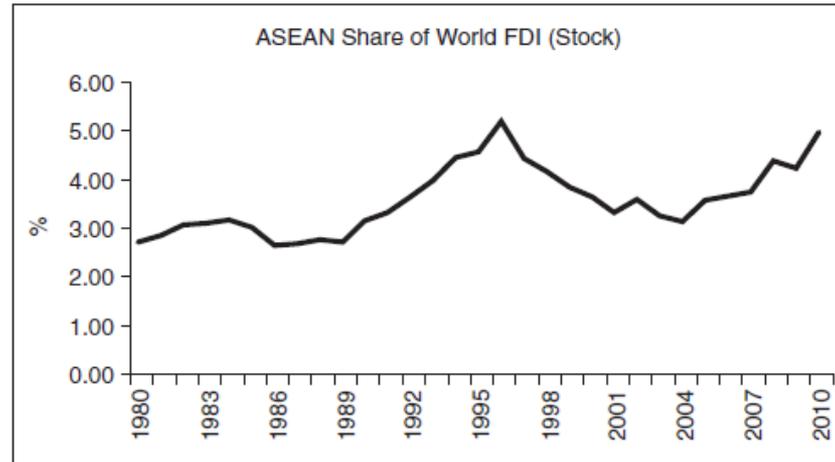
Share of Imports with NTMs, by Sector, by Country, ASEAN-5

Sectors	Indonesia	Malaysia	Philippines	Singapore	Thailand	ASEAN-5
Agro-based	93.82	89.29	23.36	21.61	53.91	66.22
Fisheries	100.00	100.00		100.00	28.94	82.35
Healthcare	61.12	4.18		71.35	17.89	44.74
Rubber-based		12.38			0.98	1.72
Wood-based	90.17	95.90				49.01
Textiles and Garments	60.48	8.64			8.86	16.97
Information Communication and Technology	99.03	23.64	84.06	83.46		64.84
Electronics	100.00	81.32	1.57	29.56	21.41	40.94
Automotives	79.67	82.80	99.99	96.19	54.33	70.48
TOTAL	85.22	46.39	62.37	71.70	27.49	58.66
PRIORITY SECTORS						

Source: Author's calculations. (Asian Development Bank)

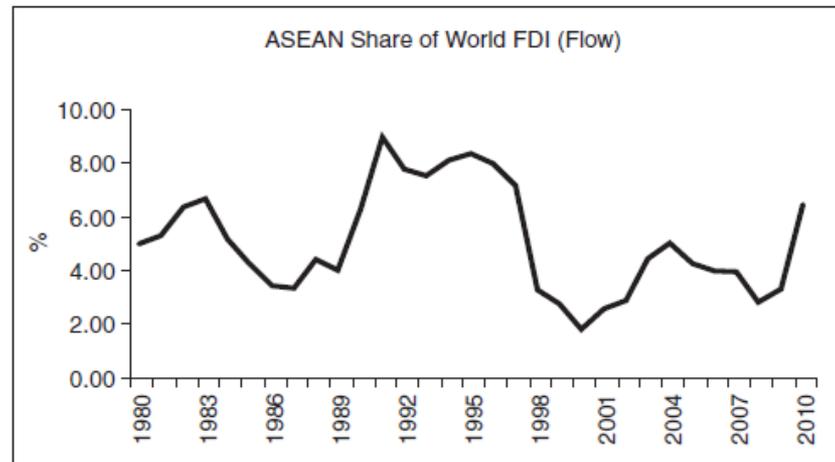
ASEAN FDI: Aggregate Trends

ASEAN has a Good Share of Global Stock



Source: Calculated by Centennial Asia Advisors using UNCTAD data.

FIGURE 4.2
But Its Share of Flows has been Declining



Source: Calculated by Centennial Asia Advisors using UNCTAD data.

ASEAN FDI: Disaggregated by Host Country

Chart 7.2. Foreign Direct Investment (FDI) to ASEAN by Host Country, 2009

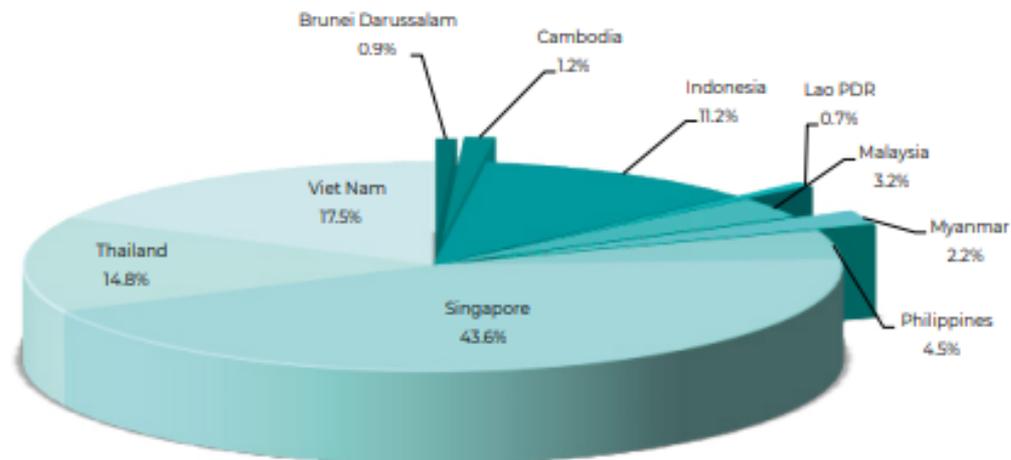
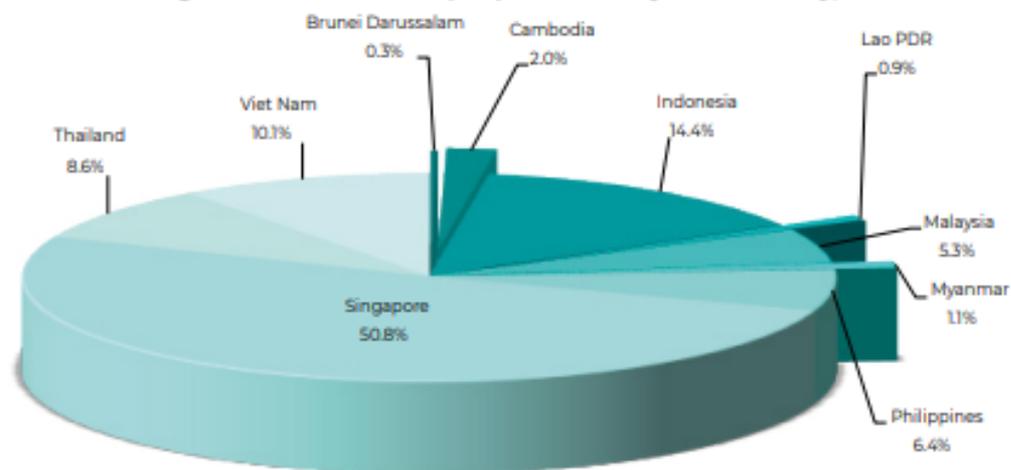


Chart 7.3. Foreign Direct Investment (FDI) to ASEAN by Host Country, 2018



ASEAN Domestic Investment Rates

Domestic Investment Rates fallen since 1990s

	1990	1991	1992	2007	2008	2009	2010
Brunei Darussalam	–	–	–	13.0	13.7	17.5	15.9
Philippines	24.2	20.0	20.9	19.9	19.7	19.0	20.5
Singapore	31.1	32.5	34.3	23.6	28.3	28.6	25.0
Thailand	40.4	41.6	39.3	26.4	27.4	24.1	24.7
Viet Nam	13.1	13.7	16.7	38.3	34.6	34.5	35.6
Indonesia	30.7	28.1	27.3	24.9	27.7	31.1	32.2
Malaysia	33.9	37.8	38.6	23.1	22.3	21.4	21.9
Cambodia	8.3	11.8	14.4	21.4	20.8	16.6	–
PRC	34.9	34.8	36.6	41.7	43.9	47.5	48.6
India	25.5	24.3	24.8	35.8	33.9	32.9	31.8

Source: Calculated by Centennial Asia Advisors using CEIC database.

ASEAN+3 Macroeconomic Research Office (AMRO)

- ASEAN + Japan, South Korea, China
- Formed in April 2011
- To be converted into official international organization (“Asian IMF”)
- Conducts research and analysis on Asian economic and financial issues
- Could invoke Chiang Mai Initiative in the event of a currency crisis

The ASEAN Economic Community: Wherefore Art Thou & Whither Thou Goest?

-  *Marriage?* → Deep Integration
-  *Cohabitation?* → Selective Cooperation
-  *Estrangement?* → Destructive Competition

