

The Asian Miracle

Will it Continue?

January 2016

Francis Tan UOB Global Economics & Markets Research

Disclaimers

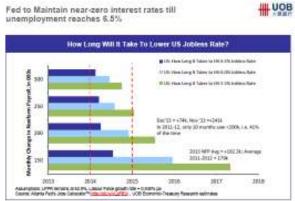
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Recap: 2013 → Will Growth-Inflation Puzzle Continue



Recap: 2014 → Of US Rates & Asian Trade







Strong Intra-Asian Trade, But Where is The Slowdown & HUOB Why?



A lot More Opportunities in Services As Income Rises



Structural Disruptions To (almost) All industries

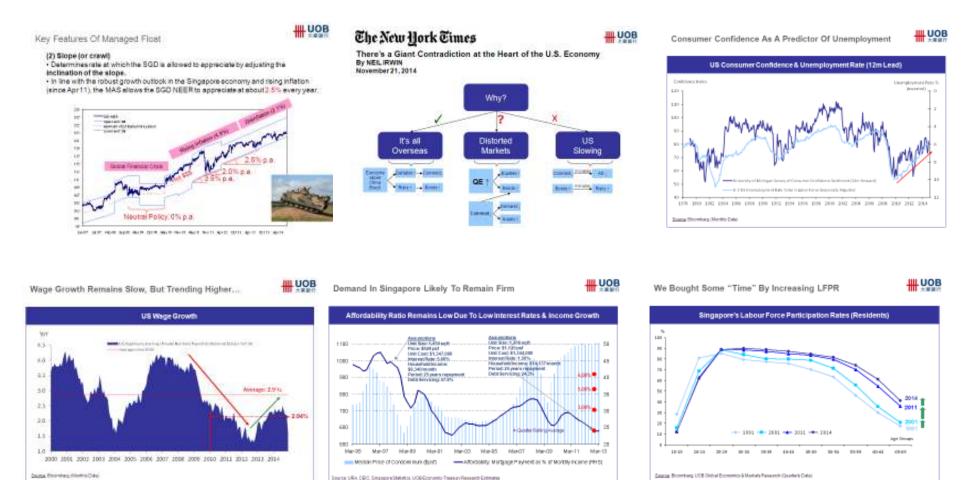
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Industries	% Share of GDP (2012)	Disruptors
Manufacturing	27%	Estratasys
Utilities	2%	1002010 Q.
Wholesale/Retail	15%	
Tpt/Storage	8%	sharetransport.sg
Accoind/Food	2%	autono roomorama pileta.com
Infocomms	4%	Onapster.
Finance/Insurance	12%	KICKSTARTER
Biz Sycs	11%	designs Minutericytore
Other Sycs	9%	() (Pricofrantitieng

* Not incide the list: Construction industry

Recap: 1H2015 → Near-term Challenges, Long-term Goals



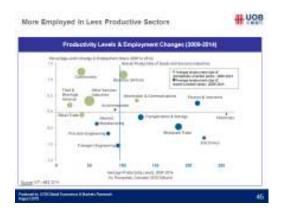
Recap: 2H2015 → First Greece, Then China: What Else Next?

	Centr	si Bank Pelicy Der	cisions i	2015	
Turacialized Turacialized	10000	Real Torget Rates 1 Fractions Real Torget Rose Real Prices	1995	0709 0709 0709 0709 0709	Bart Bart 1 + 1001 (2010) 1944(0.2211) 1999(12210)
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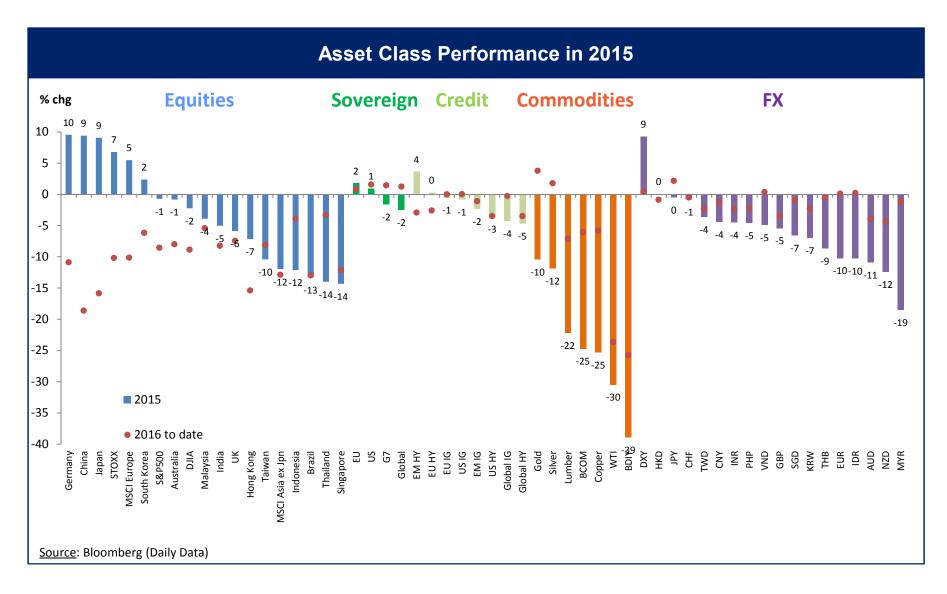




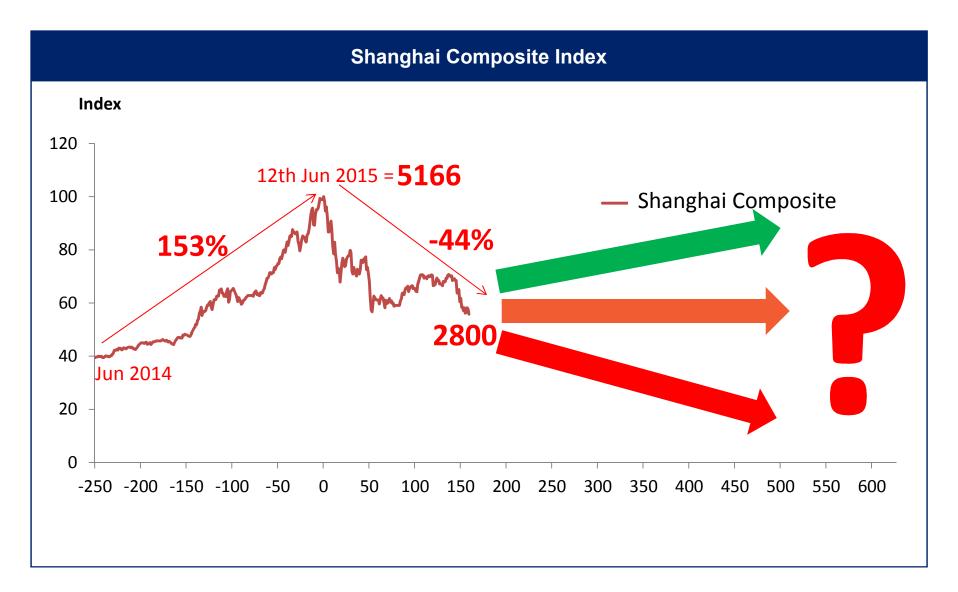
Looking Back: Top "Concerns" / "Interests" of 2015

Rank	Global News	SG News	SG Searches
10	Bangkok Bomb	Budget 2015	Lee Hsien Loong
9	Bersih 4.0	SEA Games medal tally	Lee Wei Ling
8	Nepal Earthquake	Workers' Party	QZ8501
7	Charlie Hebdo	Medishield Life	MERS
6	Greece	Prime Minister's Office	Amos Yee
5	ISIS	SG 50	iPhone 6S
4	Paris	GE 2015	WhatsApp Web
3	Sabah Earthquake	Sabah Earthquake	SEA Games
2	QZ8501	SEA Games	Lee Kuan Yew
1	MERS	PSI Singapore	PSI Singapore

Source: Google (Annual Data)



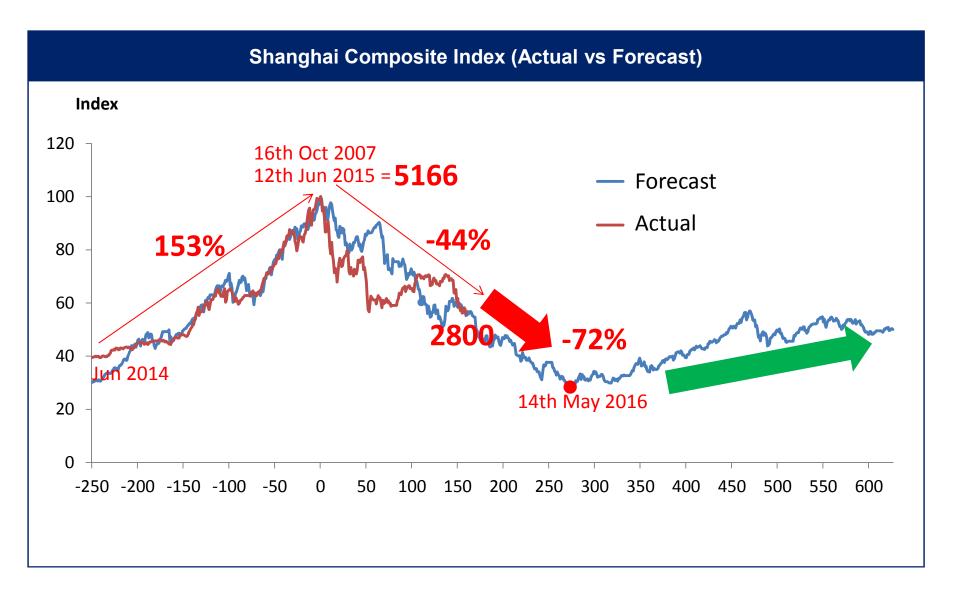


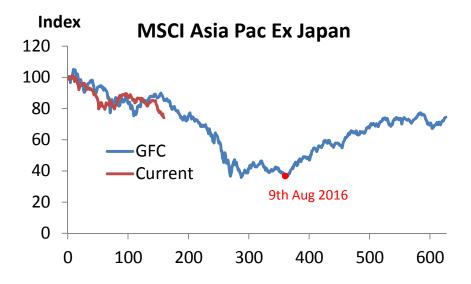


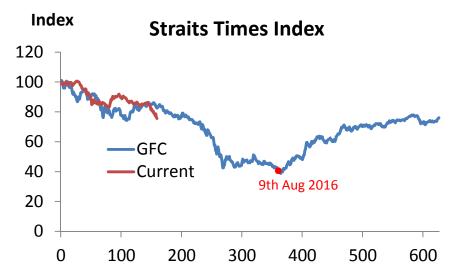


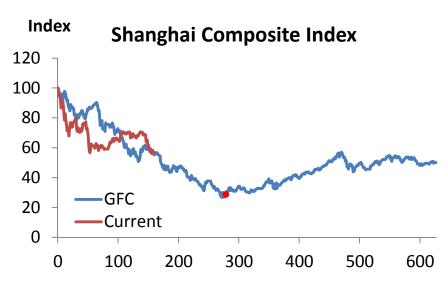
History doesn't repeat itself, ... but it does RHYME.

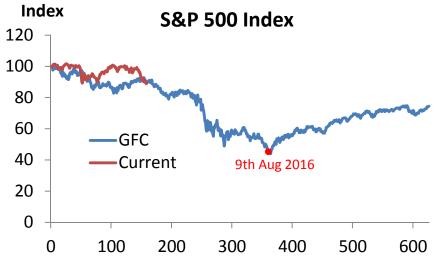
Mark Twain











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What Lies Ahead?



2010 Economic Strategies Committee

 $Y = AL^{\beta}K^{\alpha}$

1. Exploring new growth areas;

2. Anchoring global companies in Singapore while nurturing home-grown enterprises;

- 3. Growing human and knowledge capital;
- 4. Creating high-value jobs for Singaporeans;
- 5. Maximising finite resources such as land and energy





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2016 "The Future Economy" Committee

Future growth industries and markets. Identify and design growth strategies for priority clusters in Singapore, and to enable companies to seize opportunities in the global marketplace.

<u>Corporate capabilities and innovation</u>. Recommend strategies to enable companies and industry clusters to develop innovative capacities, and use technology as well as new business models and partnerships to create value.

Jobs and skills. Assess the impact of demographics and technology on the labour force, and recommend strategies to create and re-design jobs, and to equip Singaporeans with the skillsets needed for the future.

<u>Urban development and infrastructure</u>. Recommend strategies to enhance our infrastructure and develop sustainable urban spaces, so as to create an outstanding living environment for our people and reinforce economic advantage.

Connectivity. Study modern connectivity and flows in the future global economy and recommend how Singapore can continue to be a hub that brings value to Asia and the world.





Comparing The 2016 Goals With 2010's

2010

2016

1. Exploring new growth areas; 1. Future growth industries and markets.

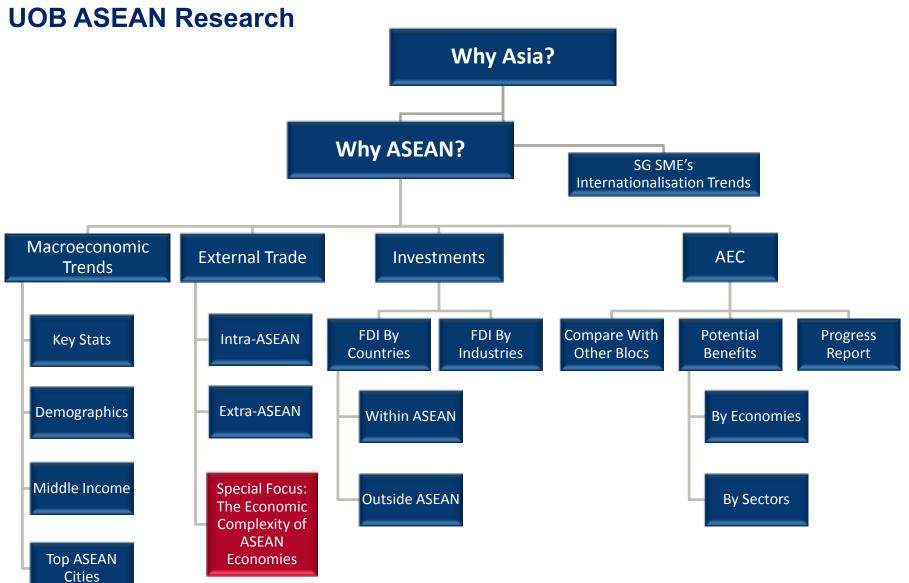
2. Anchoring global companies in Singapore 2. Corporate capabilities and innovation. while nurturing home-grown enterprises;

4. Creating high-value jobs for Singaporeans; 4. Urban development and infrastructure.

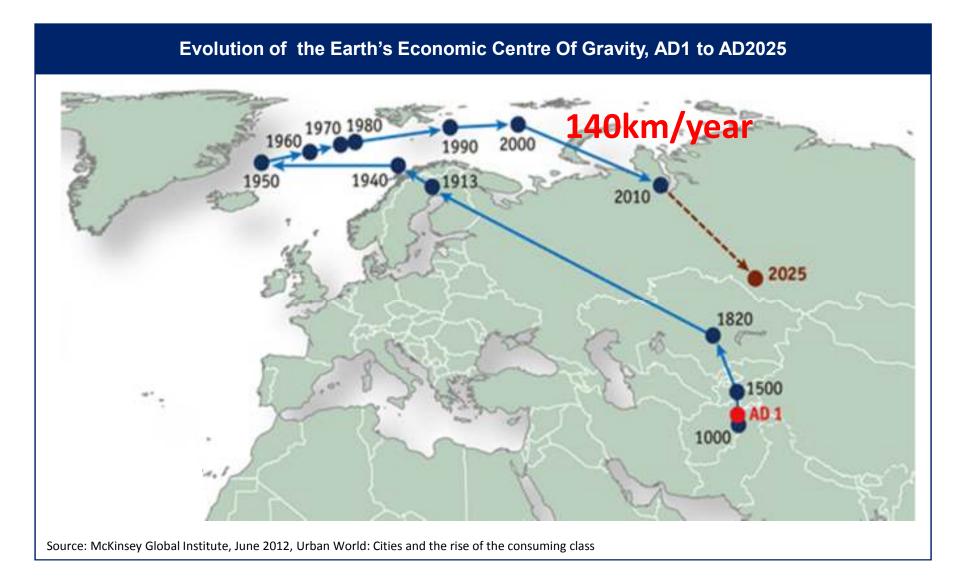
"Old Song, New Singer"



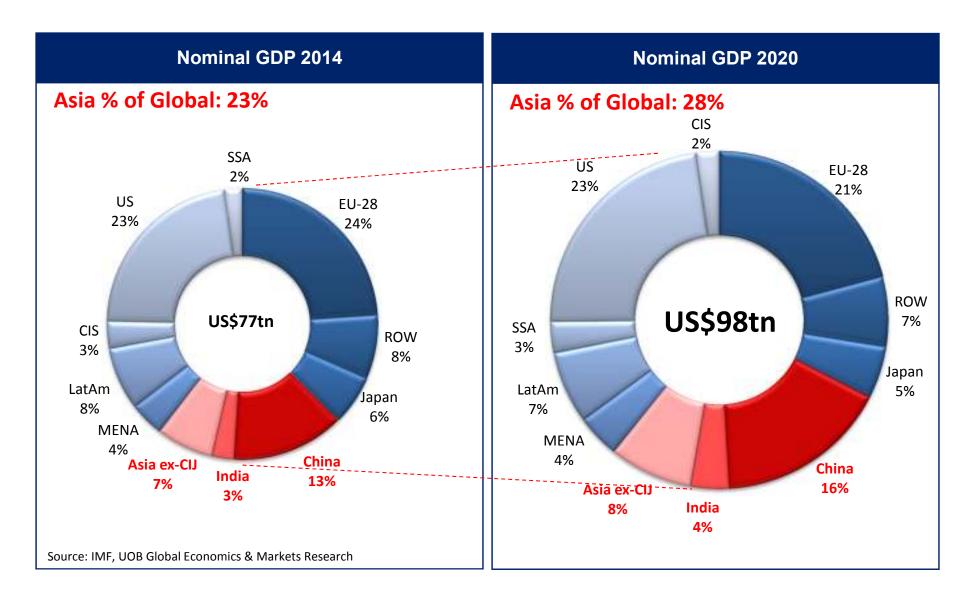




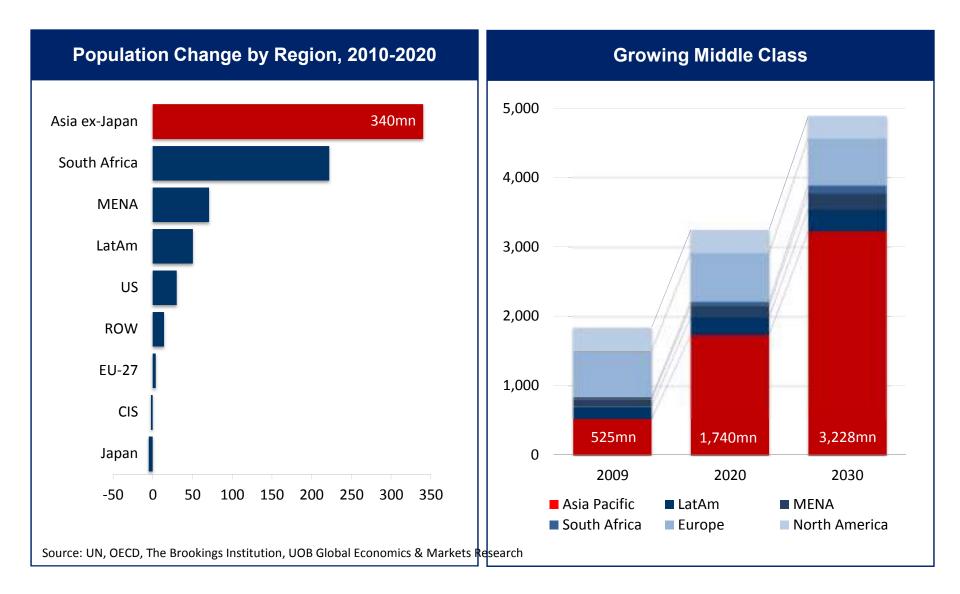
This Is The Century For Asia



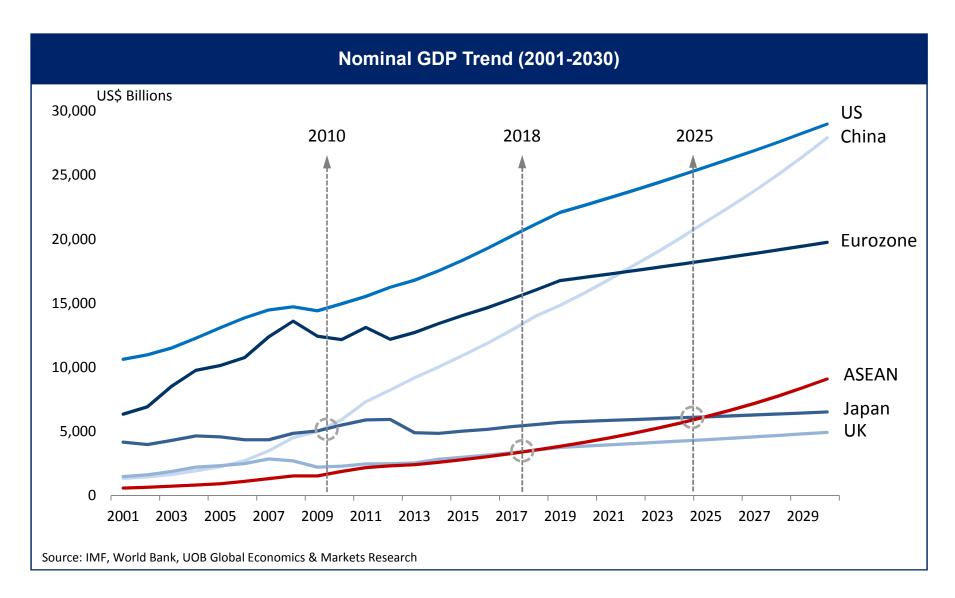
Asia's Increasing Share of Global GDP



Growing Population and Consumer Affluence

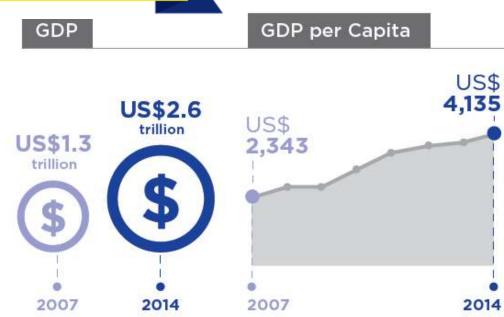


China & ASEAN Amongst World's Top Economies





ASEAN Economy



Between 2007 and 2014, ASEAN GDP **nearly doubled**, while current GDP per capita **increased by 76%**

In 2014, ASEAN economy was



Source: ASEAN Secretariat



Since 2000, ASEAN Saw Rapid & Stable Growth

GDP 2013, current prices \$ trillion		Real GDP growt 2000–13 %	h,	GDP growth volatility, 2000– %	13 ¹	Share of debt to GDP, 2013 %		Inflation rate, 20 GDP deflator, %	13
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	-0.6



Key Macroeconomic & Development Statistics (2013)

ASEAN Countries	Land Area (sq km)	Population (000)	Urban Population (%)	GDP Current Market Prices (US\$mn)	GDP Per Capita (US\$)	Internet Subscriber Per 1000 Persons	International Air Passenger Traffic (000)
Brunei	5,769	406	78.7*	16,117	39,679	130	2,017**
Cambodia	181,035	14,963	21.4	15,511	1,037	49*	3,997*
Indonesia	1,860,360	248,818	50.1	860,850	3,460	163	10,943
Lao	236,800	6,644	36.0*	10,283	1,548	108*	729
Malaysia	330,290	29,948	72.7*	312,072	10,420	226	38,032
Myanmar	676,577	61,568	30.8	54,661	888	41	2,652
Philippines	300,000	99,385	49.1*	269,024	2,707	64*	16,421*
Singapore	716	5,399	100.0	297,941	55,182	720	52,775
Thailand	513,120	68,251	33.9*	387,574	5,679	27*	54,005
Viet Nam	330,972	98,709	32.2	171,219	1,909	58	13,203*

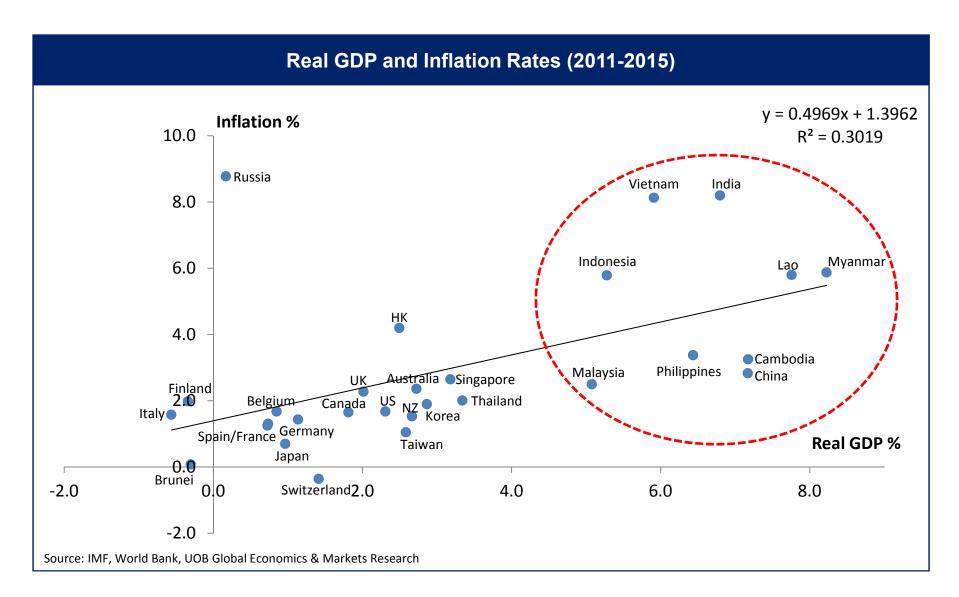
* 2012 figure

** 2011 figure

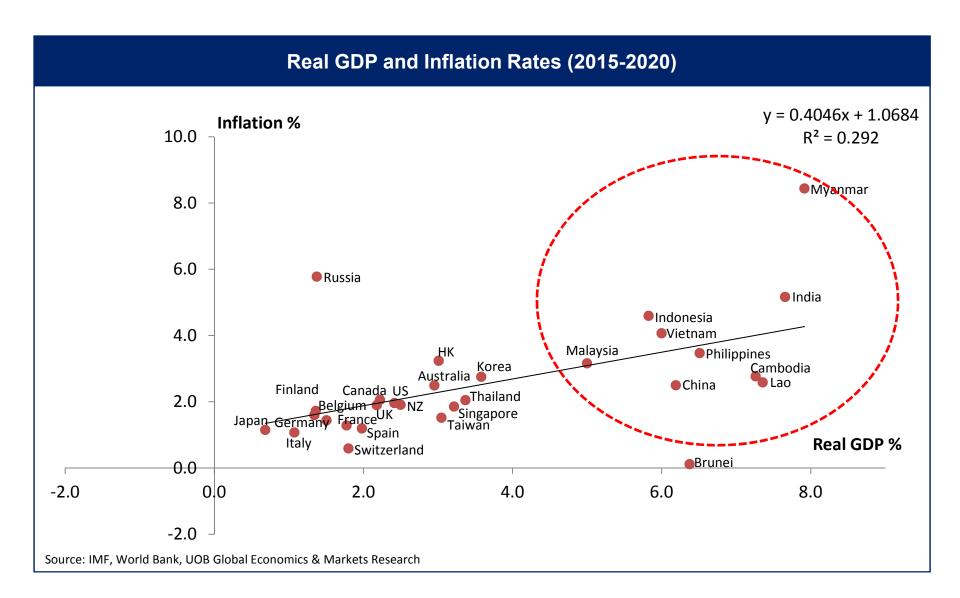
Source: ASEAN Statistics Leaflet – Selected Key Indicators 2014



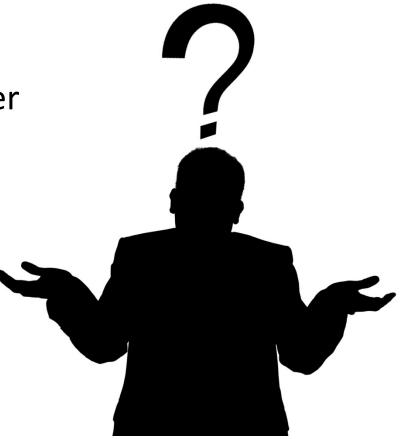
Relatively More Favourable Economic Conditions



Relatively More Favourable Economic Conditions



Did the Rise of China as a Manufacturing Powerhouse Cannibalise Exports from other Countries (eg: ASEAN)?



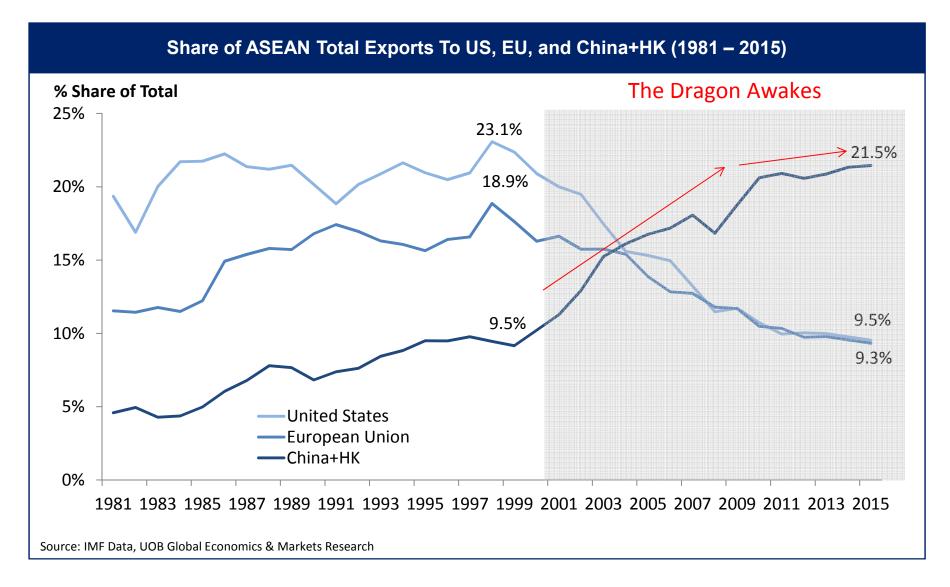
US Goods Impor	ts, US\$ bill	ions	US Goods Imports, US\$ billions		
Country	Country 2000 % Total		Country	2012	% Total
World	1,258	100	World	2,334	100
Canada	233	18	China	444	719
EU	219	17	EU	376	16
Japan	151	12	Canada	327	14
Mexico	137	11	Mexico	280	12
China	108	9	Japan	150	6
ASEAN	91	7—	ASEAN	127	\rightarrow 5
EU Goods Impor	rts, <mark>US\$ bi</mark> l	lions	EU Goods Imports, US\$ billions		
Country	2000	% Total	Country	2012	% Total
World	913	100	World	2,358	100
USA	190	21	China	375	>16
Japan	85	9	Russia	276	12
ASEAN	69	8	USA	265	11
China	69	8	Switzerland	137	6
Russia	59	6	Norway	130	6
Switzerland	58	6	ASEAN	129	>5

The Importance of China as an Exporter to the US and EU

Source: Christopher Napoli, "China's Economic Rise: Implications for ASEAN Trade Flows", Journal of Southeast Asian Economics Vol. 31, No. 3 (2014). Pp. 345-60



ASEAN Exported Less To US & EU Since 1998, But A lot More To China





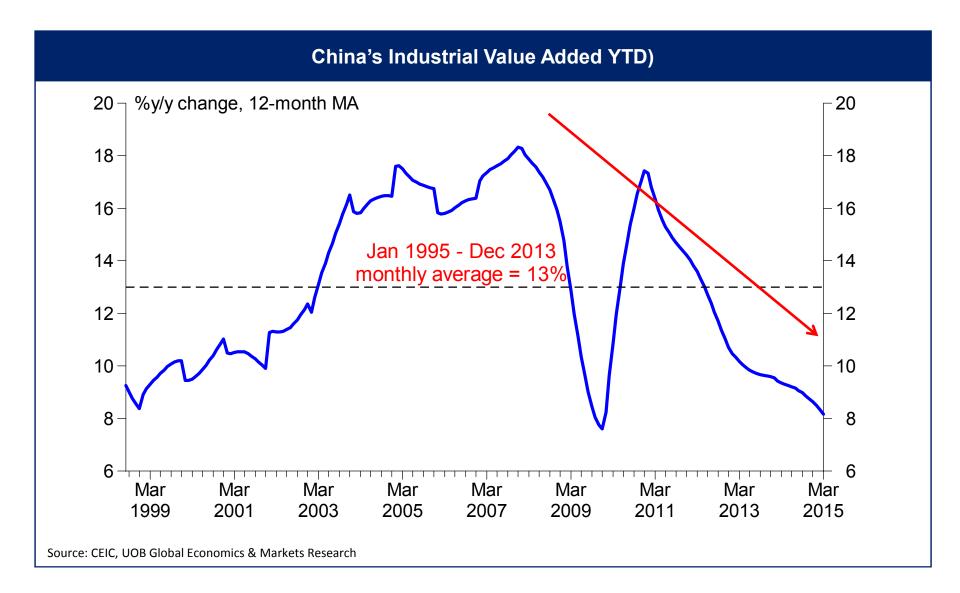
But Can The China Growth Engine Continue To Roar, Or Slow To A Sputter?

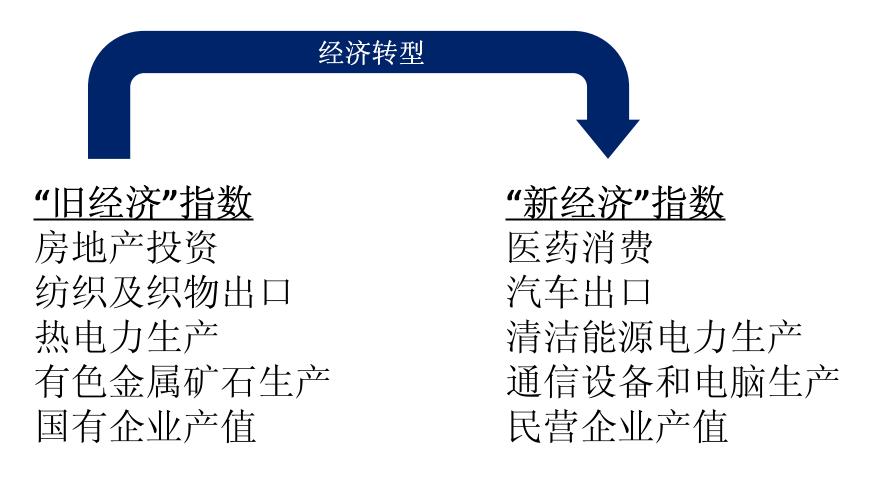


Slower Growth This Decade... And Longer?



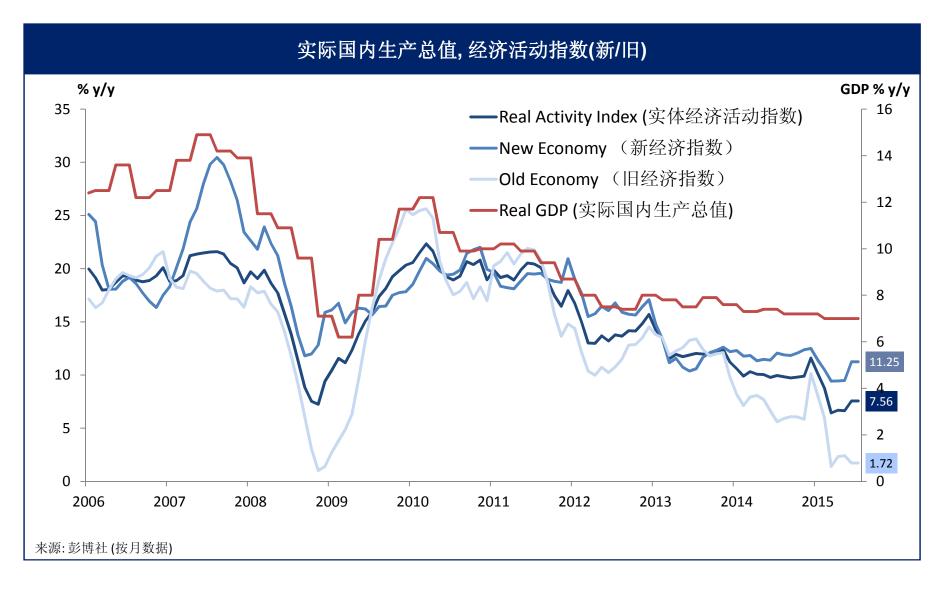
Manufacturing Powerhouse Slows Down





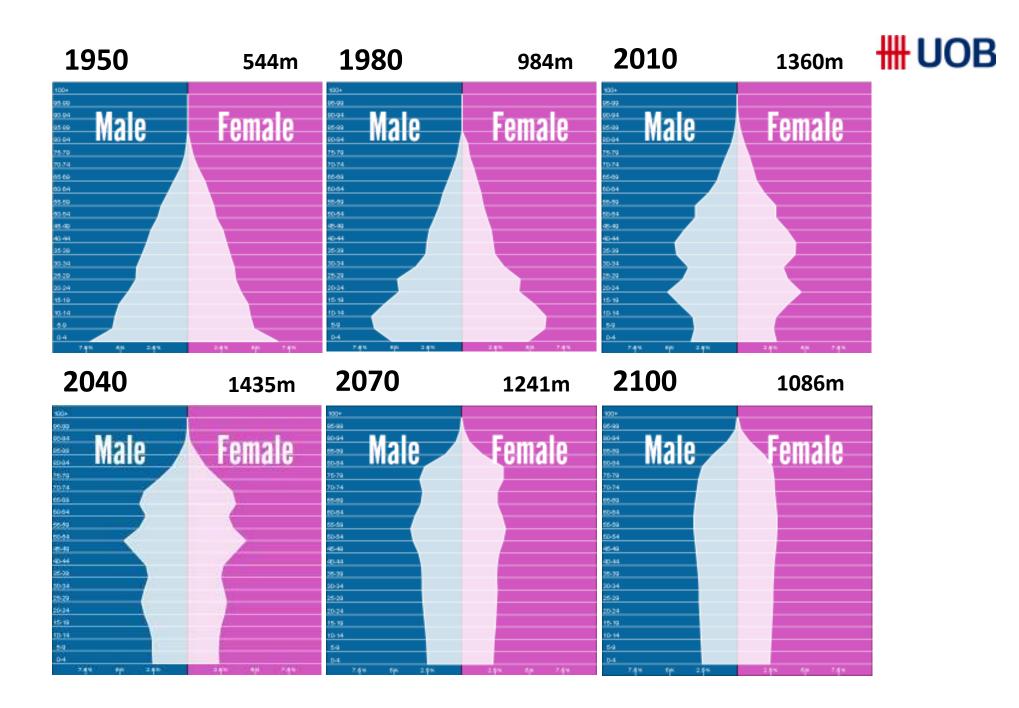


新经济行业在支持7%的经济增长

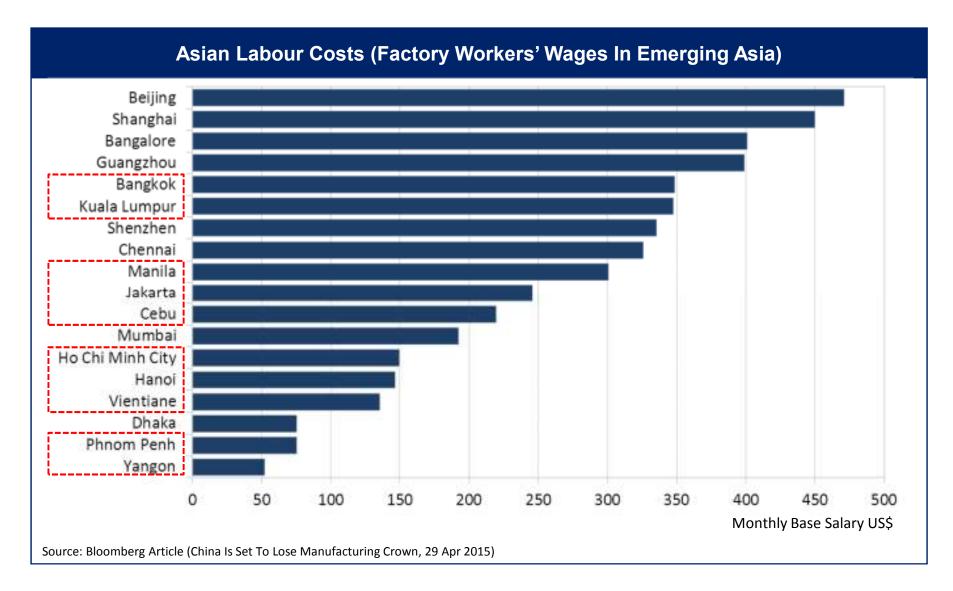




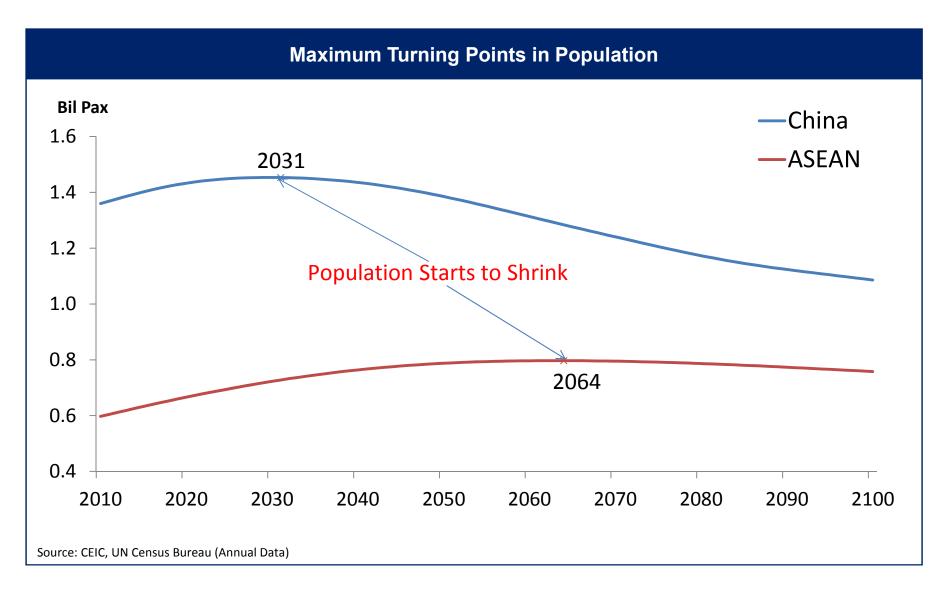




Rising Labour Costs Across China's Cities



Demographics of China and ASEAN



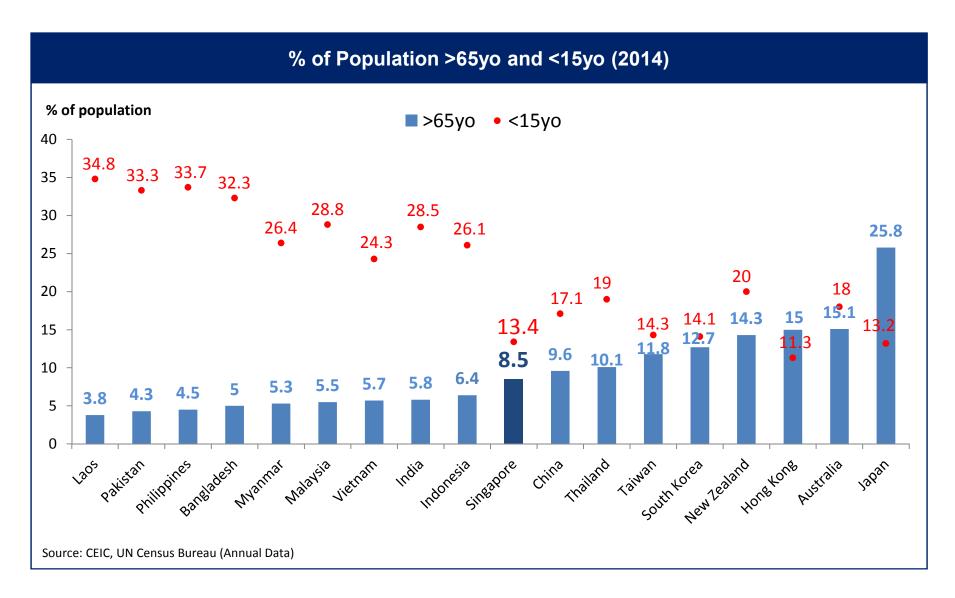
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ASEAN Population In 2014, ASEAN population was the **3**rd largest in the world ASEAN CHINA INDIA EU US 1,260 622 504 1,368 319 million million million million million LUnder 30 14 14 14 14 14 14 14 14 14 14 14 years old 14 **II** Over 30 14 14 14 14 14 14 14 14 14 14 14 vears old 14 14 14 14 14 14 14 14 14 14 14 14 14 24 24 14 14 14 14 14 14 14 14 14 14 14

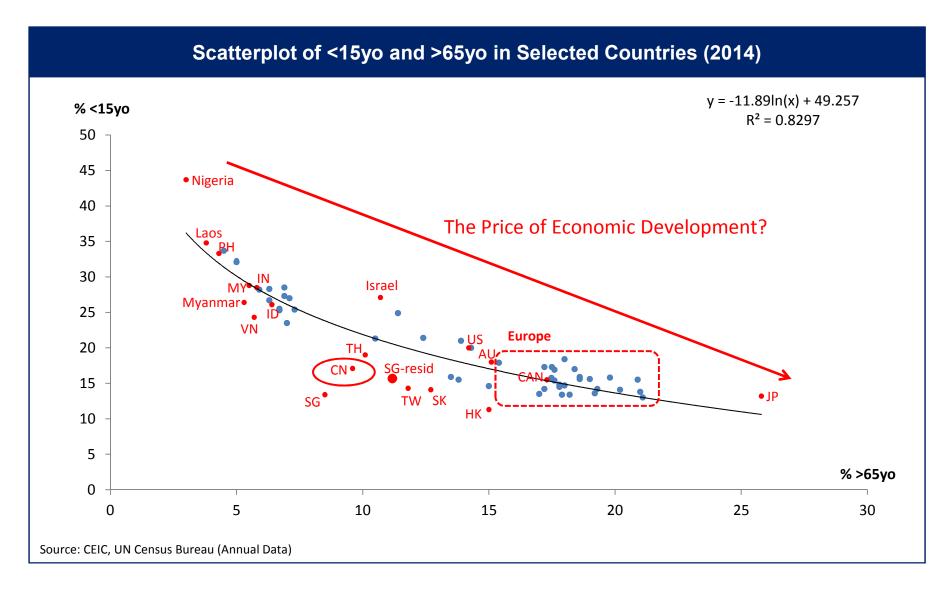
Source: ASEAN Secretariat, UN

Over half of ASEAN population were **below 30 years of age** in 2014, as compared to 39% of East Asian and 34% of European.

Strong Demographics Is On ASEAN's Side

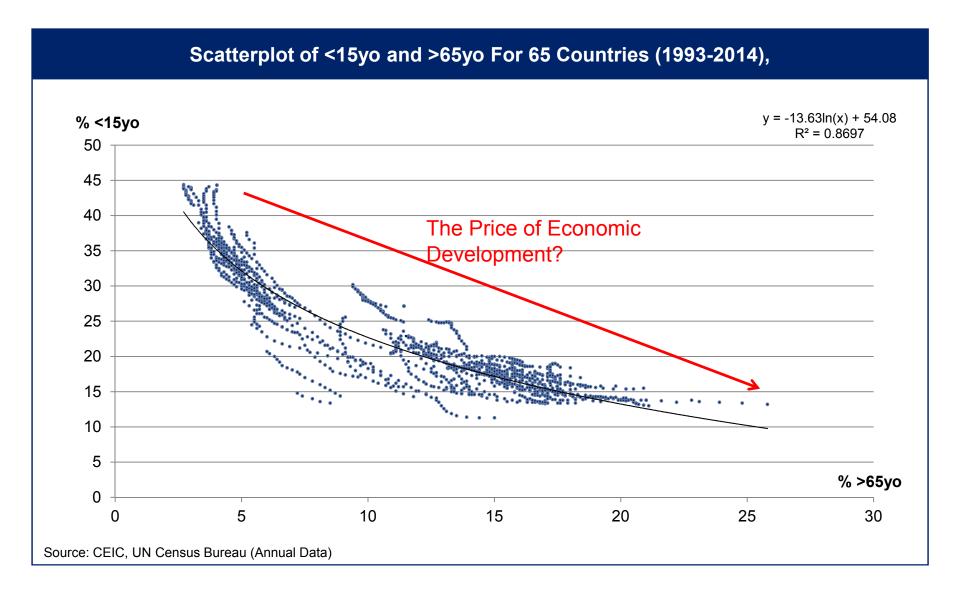


Economic Development = Higher Dependency Ratios?

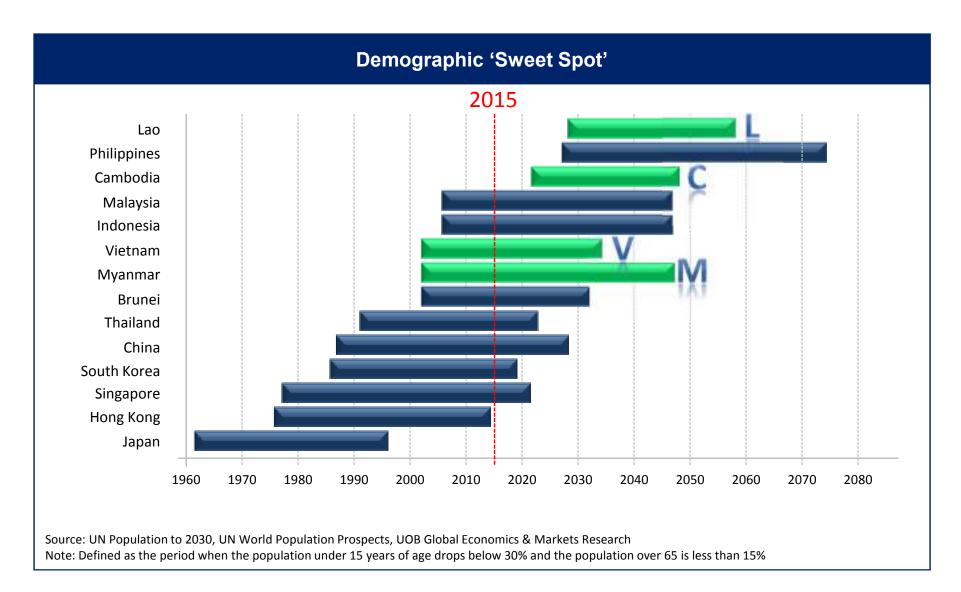




Economic Development = Higher Dependency Ratios?



ASEAN Set To Benefit From Strong Demographic Profile







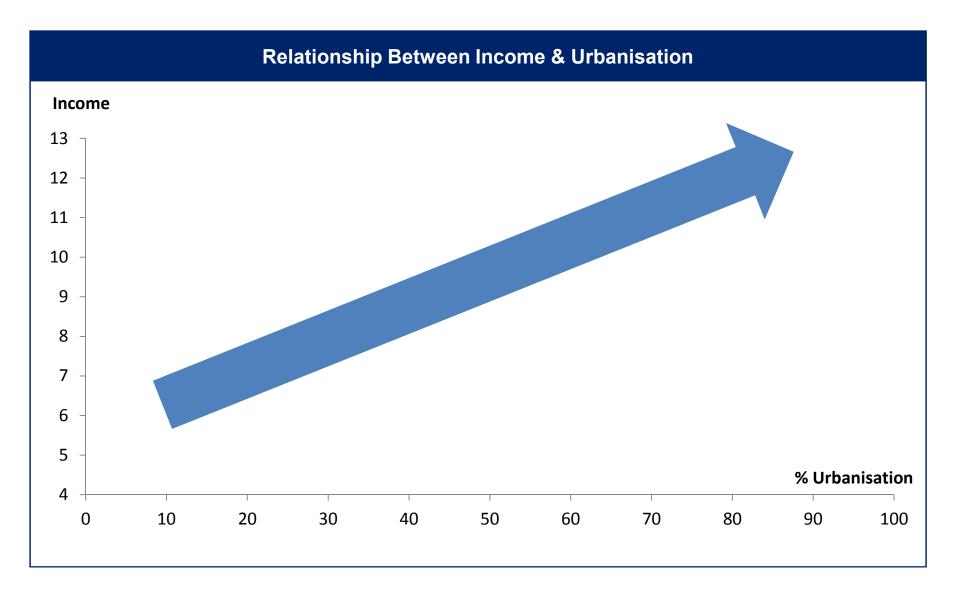
"Rural-Urban Migration". So What?





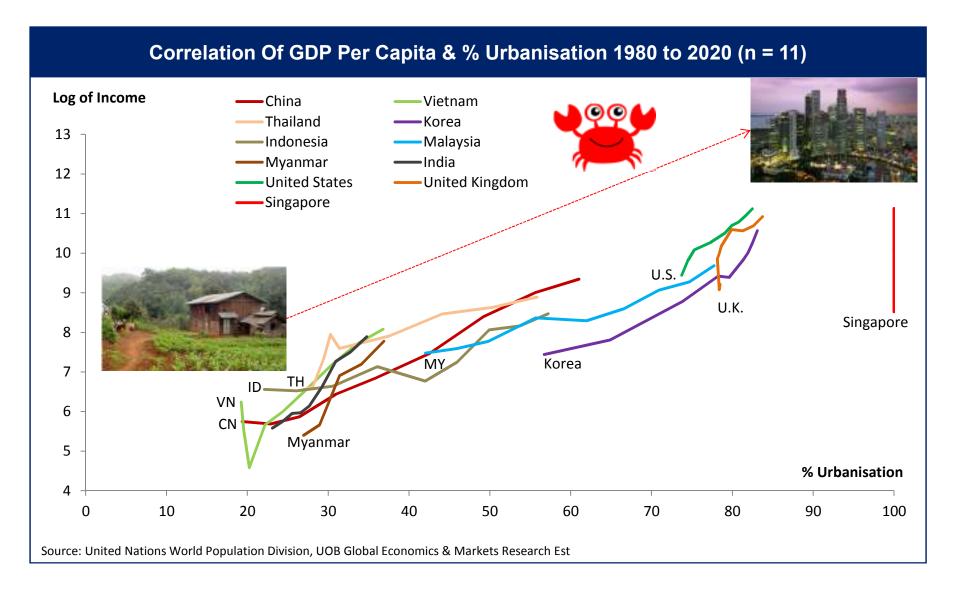


Quiz Time...



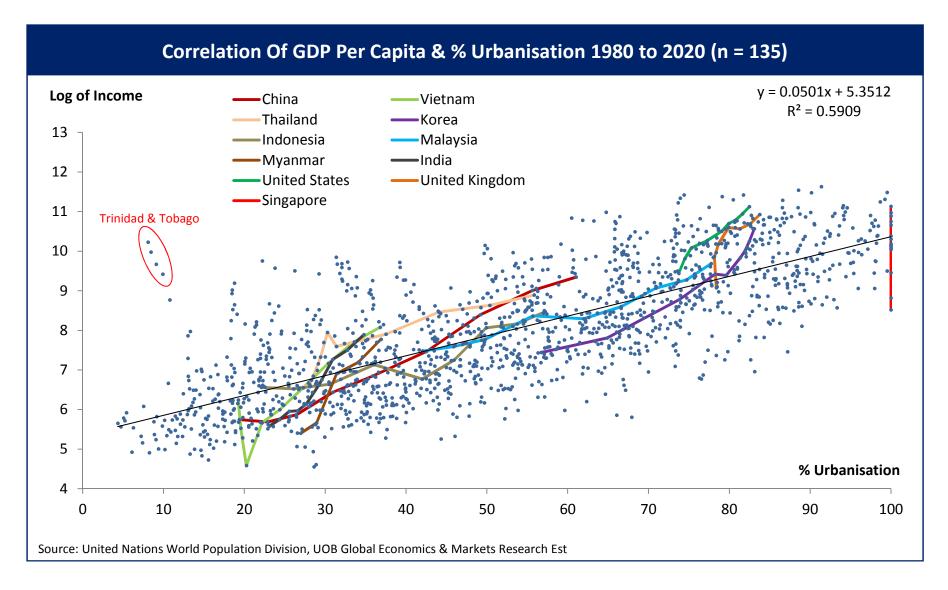


Urbanisation Is Positively Correlated With Rising Prosperity

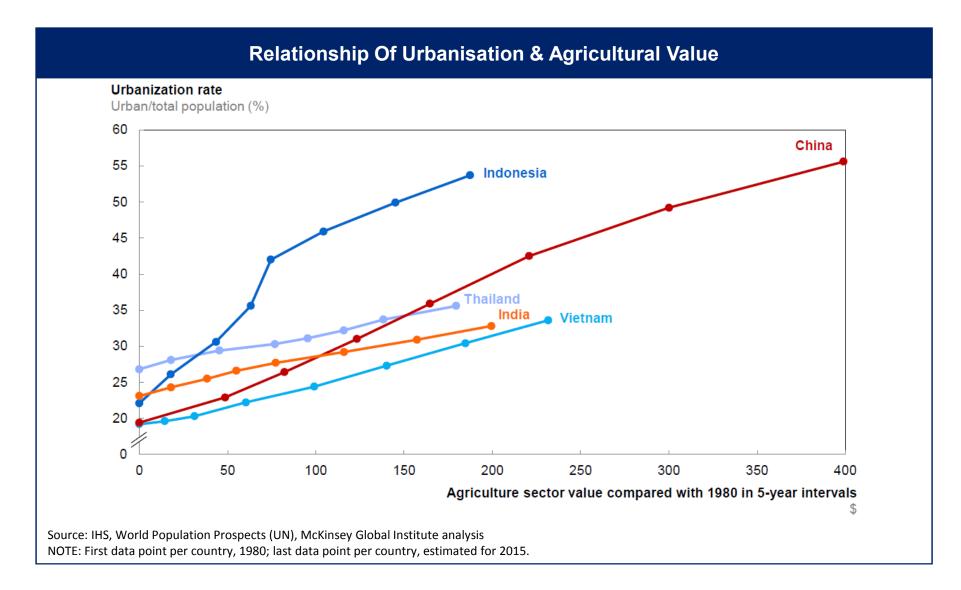




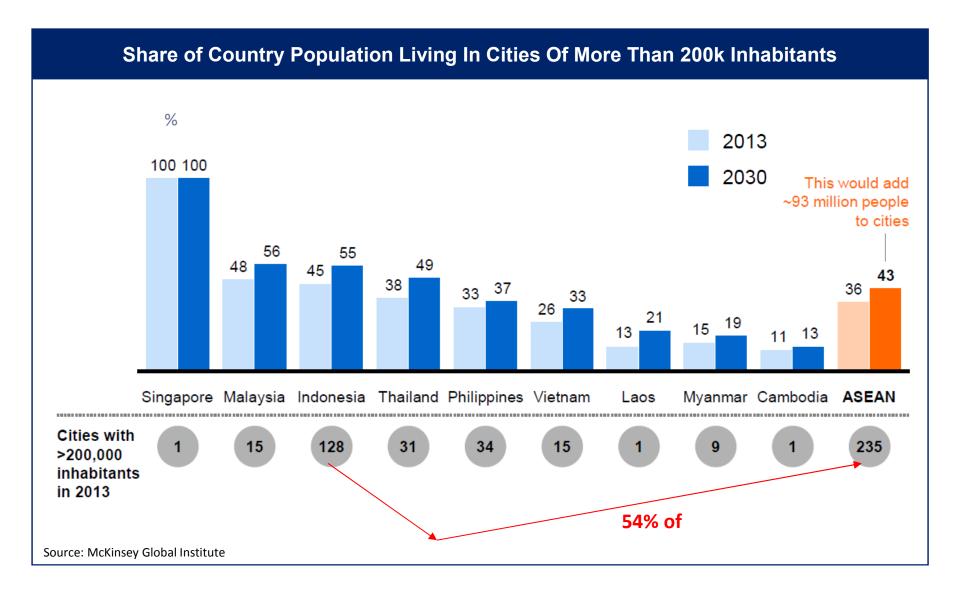
Urbanisation Is Positively Correlated With Rising Prosperity



Increase Urbanisation -> Increase Agricultural Value

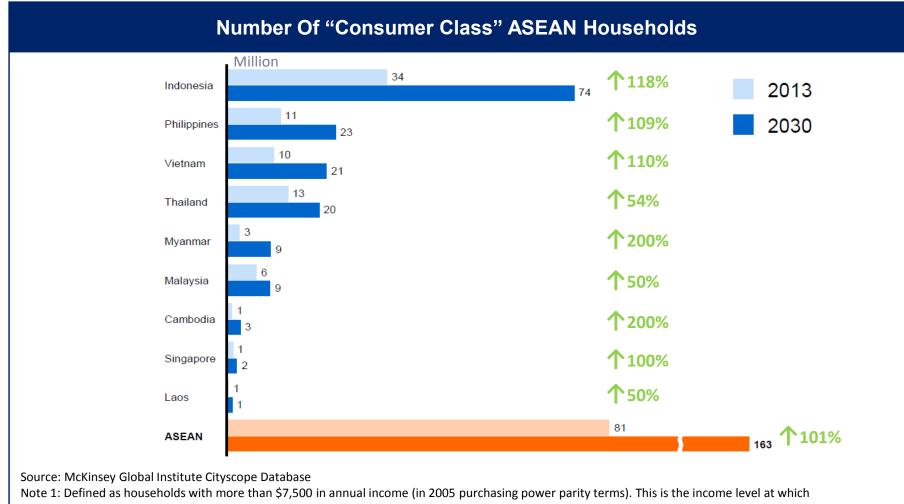


90 Million More People Moving Into ASEAN Cities





"Consumer Class" ASEAN Households To Double By 2030



households begin to make significant discretionary purchases;

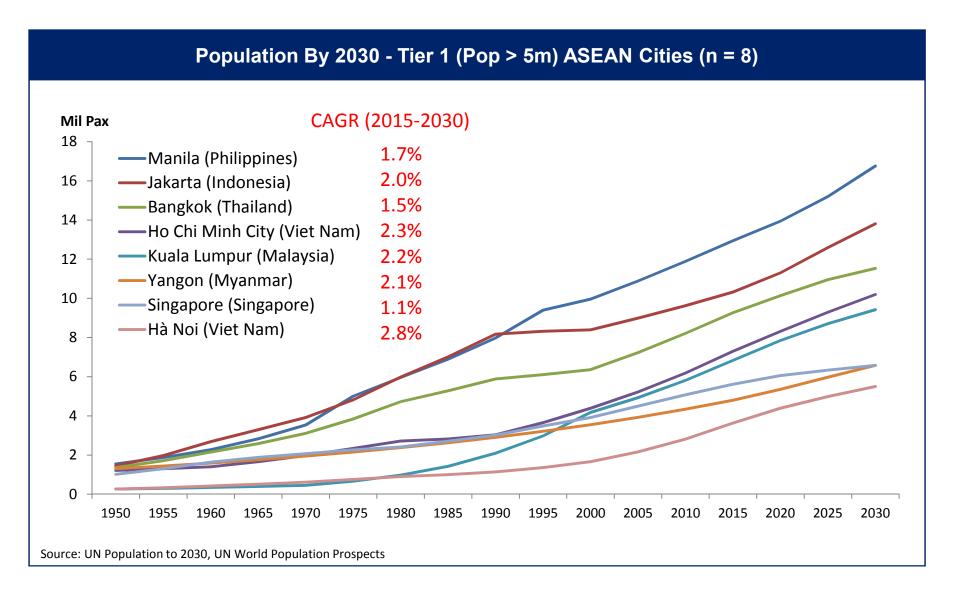
Note 2: Brunei not shown on chart as number of consuming class households in 2030 is only ~0.1 million.



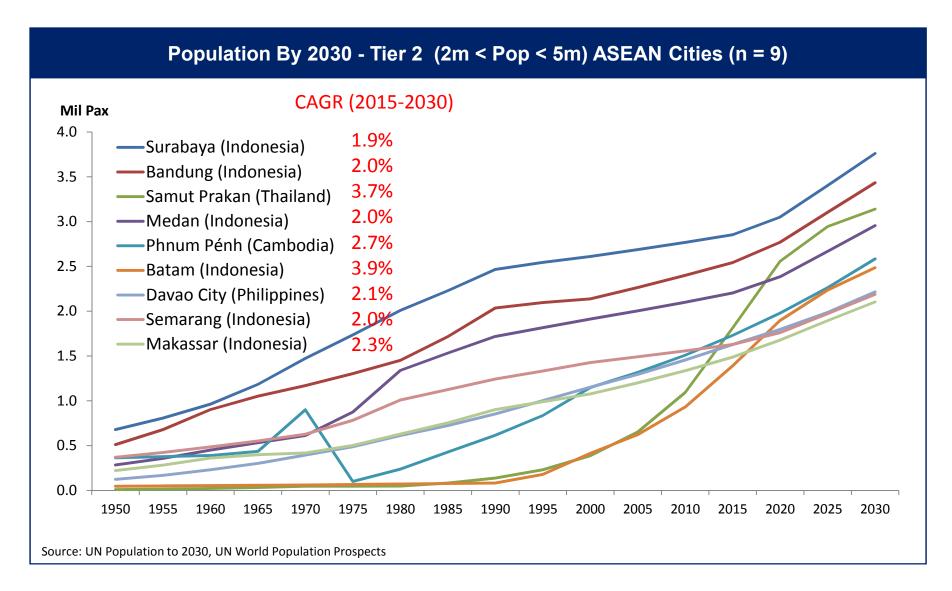
Largest Growth Opportunities In Mid-Sized Cities

	Compound annual g	rowtł	n rate				Urban Rural	Share o %	of GDP
	of GDP, 2013–30			Numb	er of cities		Rurar	2013	2030
Large and megacities Cities 5 million and above		5.2		11				39	42
Midsize middleweights Cities 2 million–5 million		5.4		9				5	6
Small middleweights Cities 750,000–2 million			6.1		54			12	15
Smaller middleweights Cities 200,000–750,000			6.5			161		11	14
Towns and rural ¹	2.8			n/a				33	24
Total ASEAN		4.8					235	100	100
	•			•					

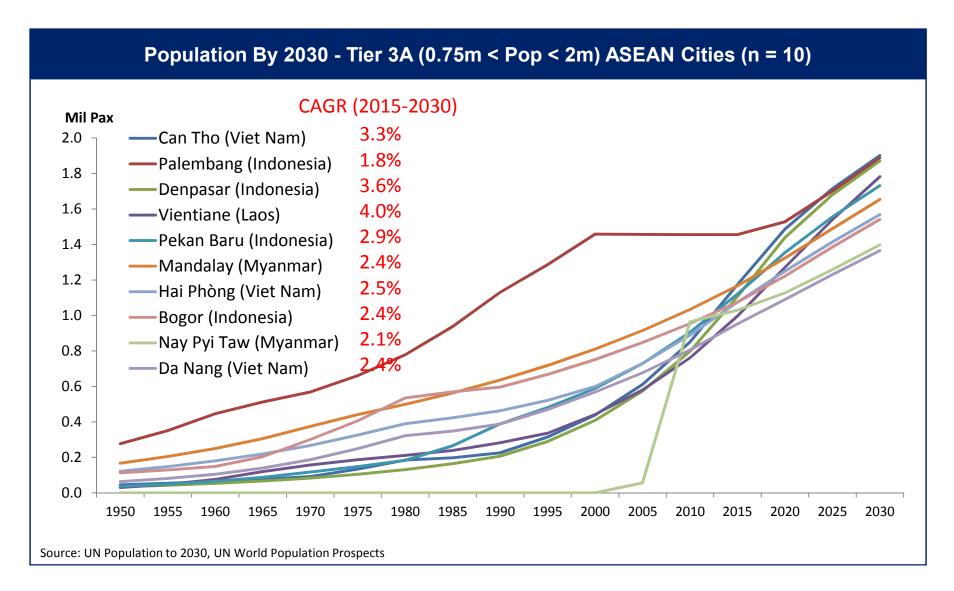
Largest ASEAN Cities By 2030



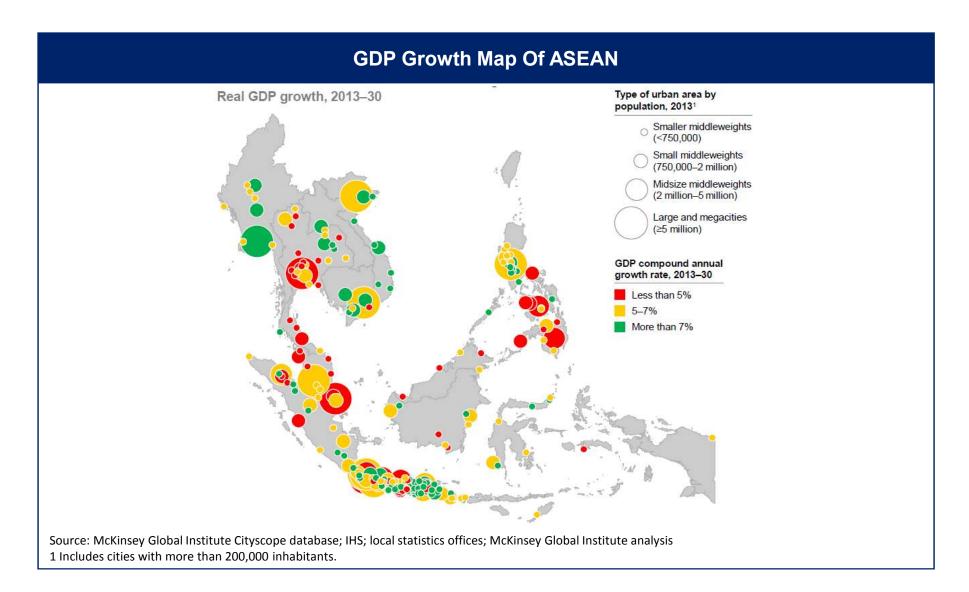
Tier 2 ASEAN Cities By 2030



Tier 3 ASEAN Cities By 2030



Key Cities In ASEAN That Will Drive Economic Growth



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But...

Younger = YES Cheaper = MAYBE

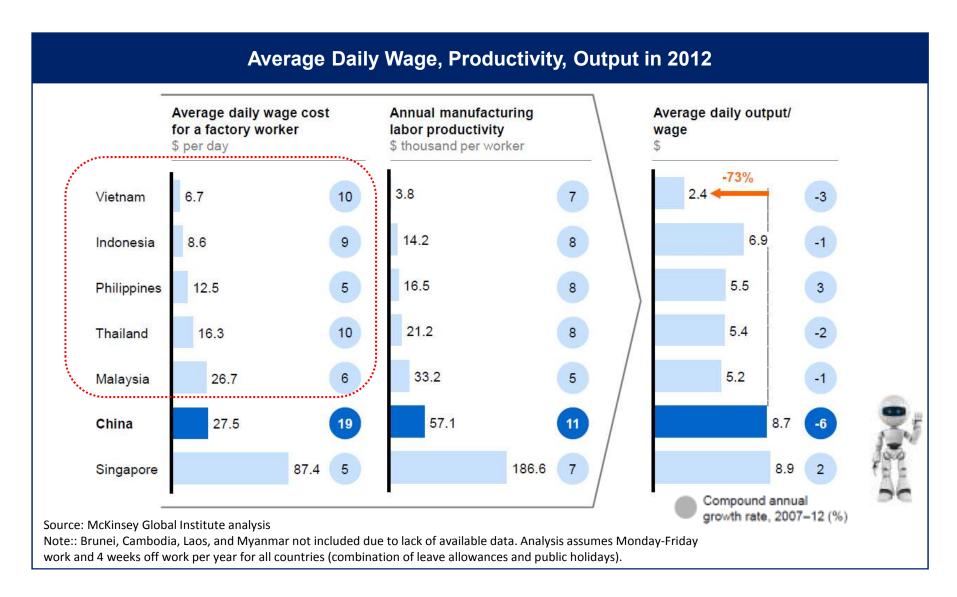


"Better, Faster?"





Although Cheaper Than China, ASEAN Not As Productive





Infrastructure <u>Challenges</u> In ASEAN YOUR opportunities!

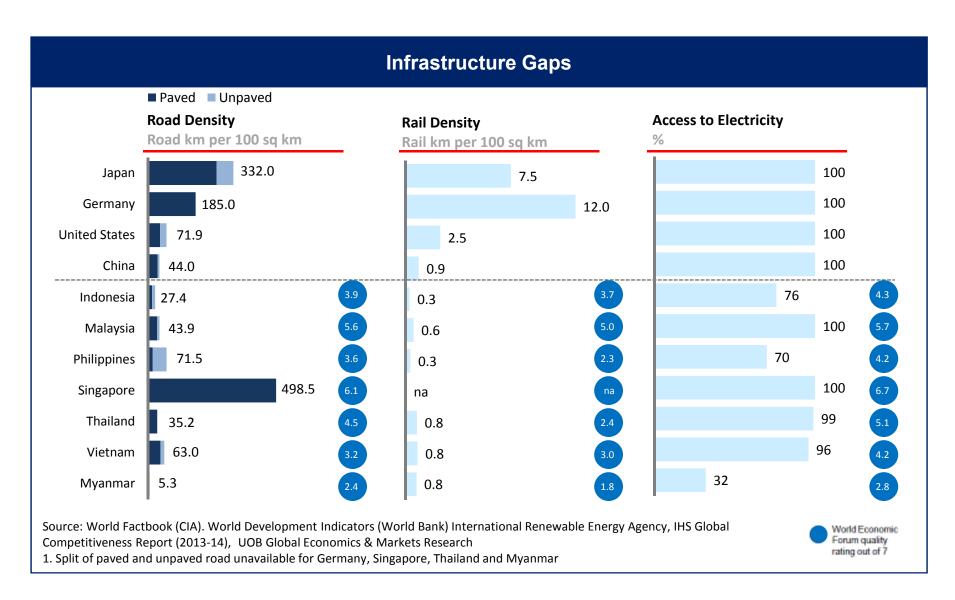


Asia Lags Behind OECD and Latin American Economies In Infrastructure Coverage

Country	Roads (km)	Rail (km)	Phone (number)	Electrification	Clean Water
Country		Per 1,000 pe	ople	Percen	itage
ASEAN	10.5	0.27	3.5	71.7	86.4
Asia	211.7	5.21	13.9	99.8	99.6
Latin America	14.3	2.48	6.1	92.7	91.4
Africa	n.a.	0.95	1.4	28.5	58.4

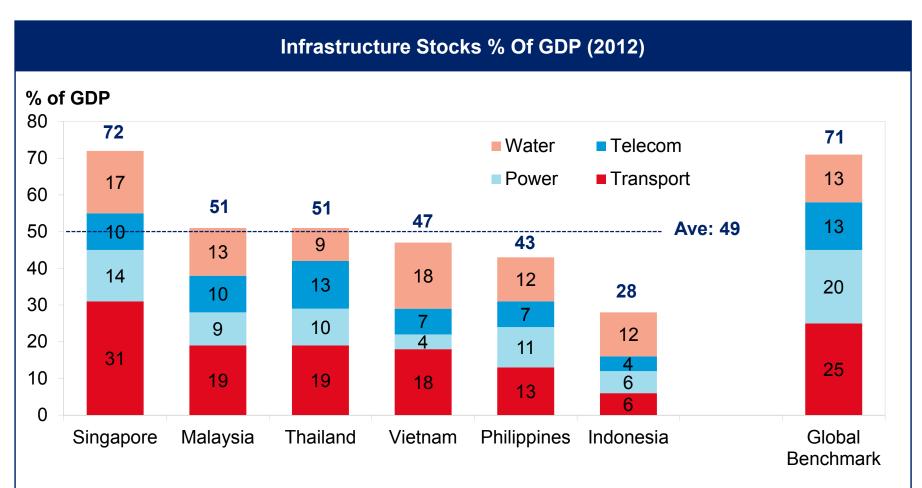
Source: IE Singapore (IE Insights Vol.18)

Gaps In Supply & Quality Of Infrastructure In ASEAN





Most ASEAN Countries Inf. Stock Below Global Average

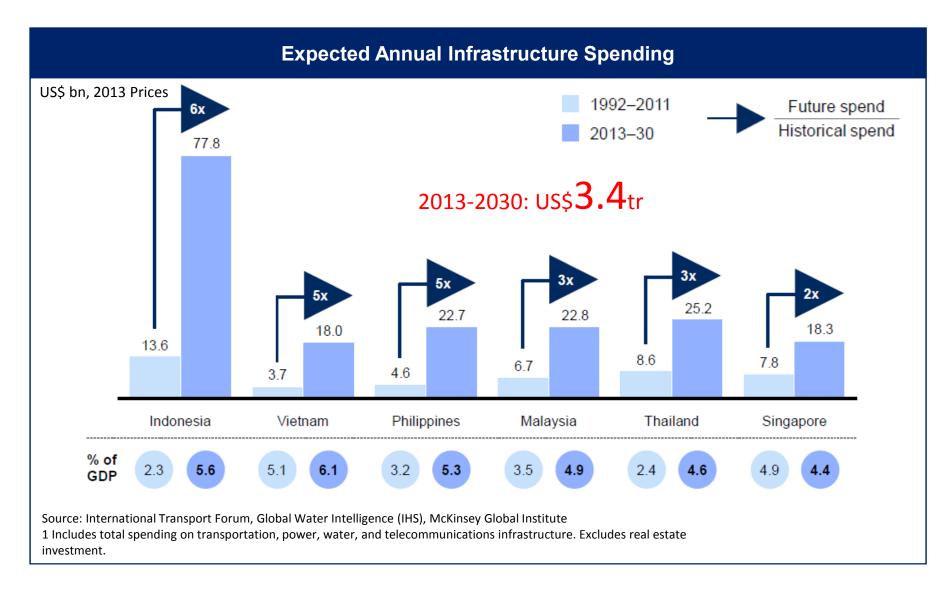


Source: International Transport Forum, Global Water Intelligence (IHS), McKinsey Global Institute

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.

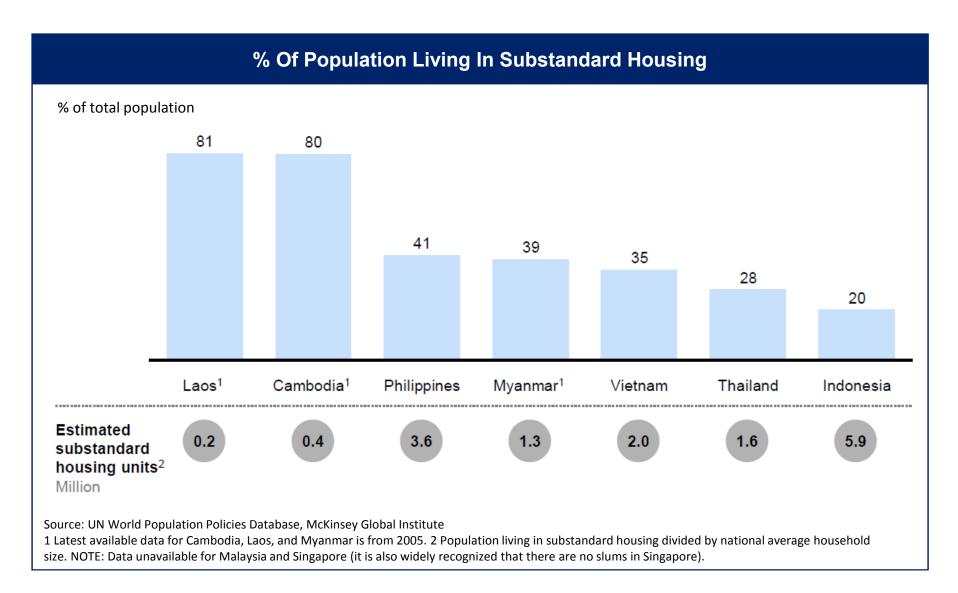


Infrastructure Spending To Increase Further



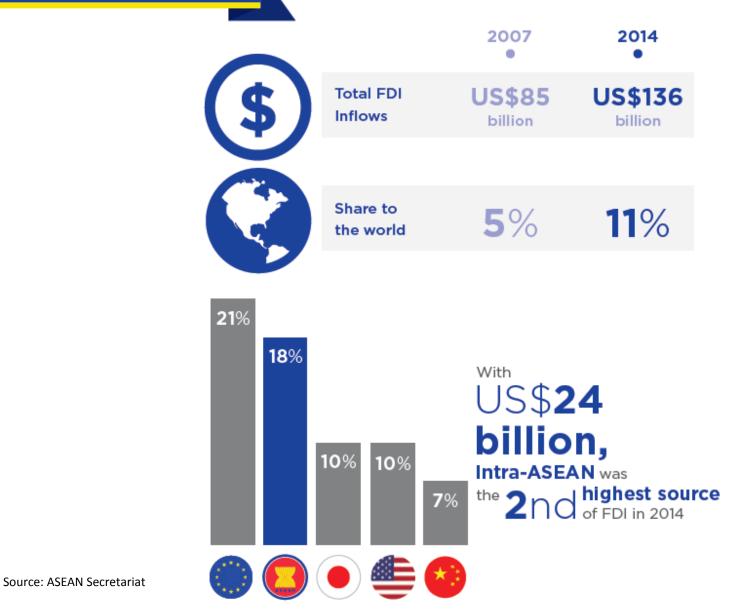
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Many In ASEAN Living In Substandard Housing

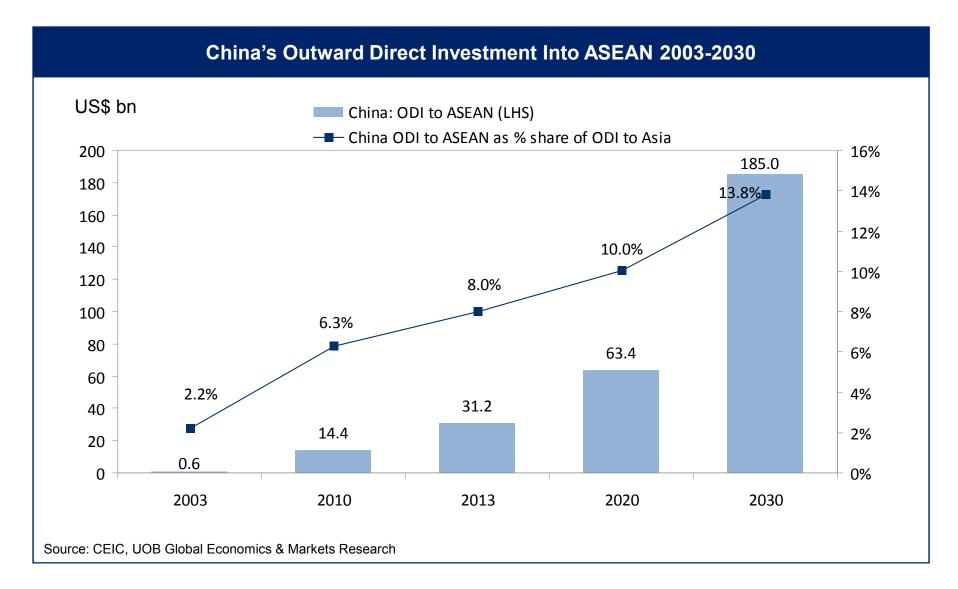








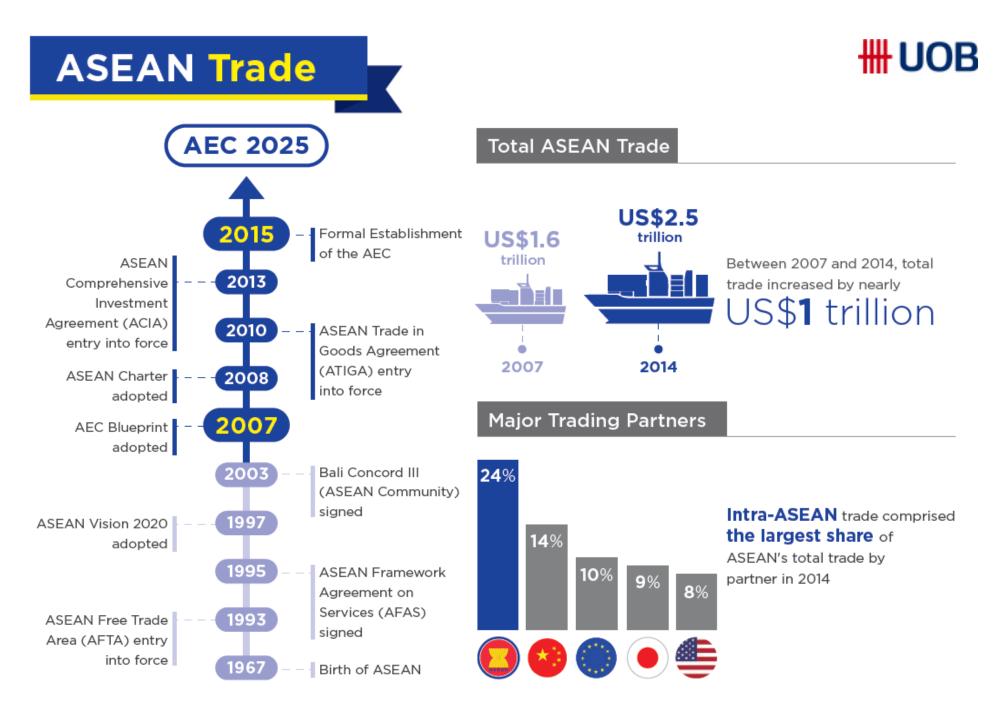
More Chinese Investments Into ASEAN





Will AEC Bring More Trade Flows?





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42.5% Of ASEAN Merchandise Exports Go To ASEAN & China (including Hong Kong)

		;	Share of	Exports	To Trade	Partners	s, 2014 (%	%)		
Exports	ASEAN	China + Hong Kong	India	Japan	South Korea	Australia	European Union	United Kingdom	United States	Canada
Brunei	14.0	0.8	6.5	42.3	17.2	8.2	0.1	0.1	0.2	0.1
Cambodia	13.6	4.6	0.1	5.7	0.0	0.8	32.8	8.5	28.3	0.0
Indonesia	11.2	16.2	7.2	13.7	6.3	3.0	8.8	0.8	9.4	0.7
Laos	57.5	27.4	0.0	2.8	0.3	1.5	8.8	2.1	0.9	0.3
Malaysia	25.1	23.5	3.0	9.8	3.7	3.3	7.8	1.6	9.2	0.8
Mynamar	42.4	26.1	12.6	6.9	4.5	0.2	2.4	0.7	0.3	0.1
Philippines	14.8	32.4	0.6	12.6	5.1	1.1	8.9	0.7	13.2	1.7
Singapore	29.4	23.6	2.7	2.8	4.0	5.3	8.3	0.9	6.9	0.5
Thailand	23.6	20.0	2.3	9.2	2.2	5.0	9.2	1.5	11.3	1.2
Vietnam	13.6	15.2	2.0	9.8	5.0	2.8	19.5	2.8	18.0	1.6
Source: IMF										



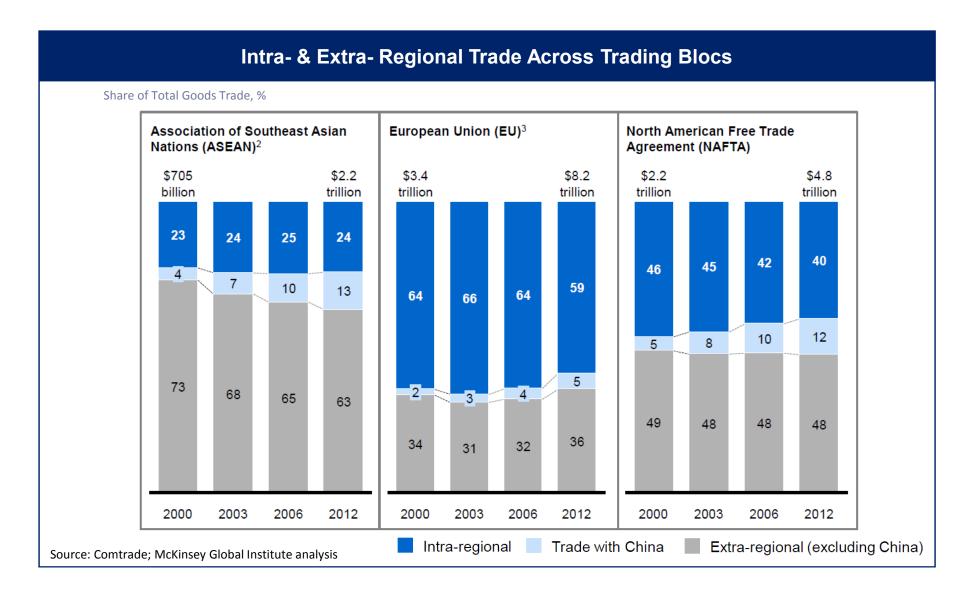
Opportunities in Asia – Trade to be Increasingly Intra-Regional

Country	2000	2011	2020F
ASIA, of which	52.3	65.5	80.0
- ASEAN 东盟	22.8	25.0	30.0
- China+TW+HK	8.8 > 33	20.8	25.0
- India	1.6	3.6	6.0
- Japan	13.6	10.1	8.0
EU 27	14.9	10.0	8.2
North America	20.1	9.9	8.5
Middle East	1.9	2.7	3.5

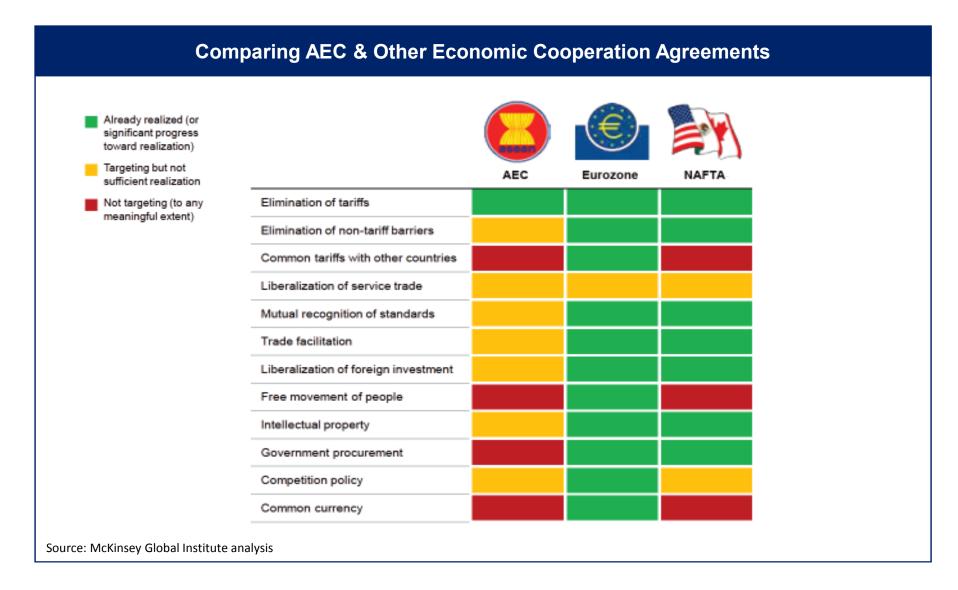
Markets Research estimates and forecasts



Lots More Room For Intra-Regional Trade In ASEAN After AEC



AEC's Aspirations Will Be Different From Other Blocs



ASEAN's Landscape Dominated By MNCs & National Champions, But Few Regional Champions

Analysis by retail value & geography, 2013

nalysis by retail value & geography, 2013				
	MNCs	Regional Champion	National Champion	No. of Comp
	Global company with ASEAN footprint	ASEAN company with significant ¹ multi-cty footprint	Strong presence in a single ASEAN cty	Total
Packaged Food & Beverages	40	15	96 4	441
	 Nestle Artisanal Royal FrieslandCampina Unilever Group Groupe Danone 	 JG Summit Hldgs San Miguel CP Group 	 Indofood Sukses Makmur (ID) Vietnam Diary Pdts (VN) Monde Nissin (PH) Masan Group (VN) Mayora Indah (ID) 	
Beauty & Personal Care	25	1	15	177
	 Unilever Group Procter & Gamble L'Oreal Groupe Colgate-Palmolive Johnson & Johnson 	• Mandom	 Better Way (TH) Giffarine Group of Cos (TH) SSUP Group (TH) Splash (PH) Kino Sentra Industrindo (ID) 	
Apparel & Footwear	27	1	13	142
	 Adidas Group Inditex Industria de Diseno Textil Nike Bata Ltd Wacoal Hldgs 	• Sing Tsu Fang	 Suyen (PH) Golden ABC (PH) Padini Hldgs Berhad (MA) Jaspal (TH) Saha Pathana Inter-Hldg (TH) 	

1: "Significant defined as > 10% of company's retail value

2: Includes small companies with <\$50m retail value (excld from MNCs/Regional/National champion analysis

3: Examples from packaged food & hot drink categories; excl soft drink & alcoholic beverage categories

Source: Euromonitor, McKinsey



ASEAN: Dominated By MNCs/National Champions, Few Regional Champions (contd')

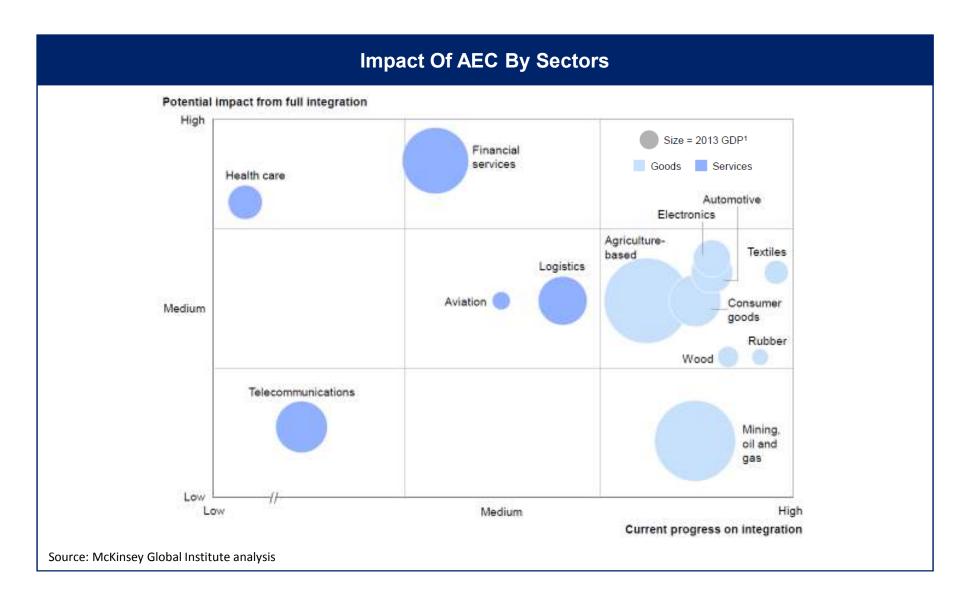
Analysis by retail value & geography, 2013

	MNCs	Regional Champion	National Champion	
	Global company with ASEAN footprint	ASEAN company with significant multi-cty footprint	Strong presence in a single ASEAN cty	Total
Consumer	35	1	18	89
Electronics	 Samsung Nokia LG Apple Sony 	Creative Technology	 Metrotech Jaya Komunika (ID) Cosmic Technologies (PH) Hartono Istana Teknologi (ID) Solid Group (PH) Samart (TH) 	
Consumer Healthcare	27	3	15	298
	 Amyway Herbalife GlaxoSmithKline Nu Skin Enterprises 	 United Laboratories Citra Nusa Insan Cemerlang 	 Kalbe Farma (ID) Temp Scan Pacific (ID) Sido Muncul (ID) Konimex Pharmaceutical Labs (ID) Scotch Industrial (TH) 	

Source: Euromonitor; McKinsey Global Institute analysis

1 "Significant" defined as >10 percent of company's retail value. 2 Includes small companies with <\$50 million retail value (excluded from multinationals/regional champion/national champion analysis). 3 Examples drawn from packaged food and hot drink categories; excludes soft drink and alcoholic beverage categories.

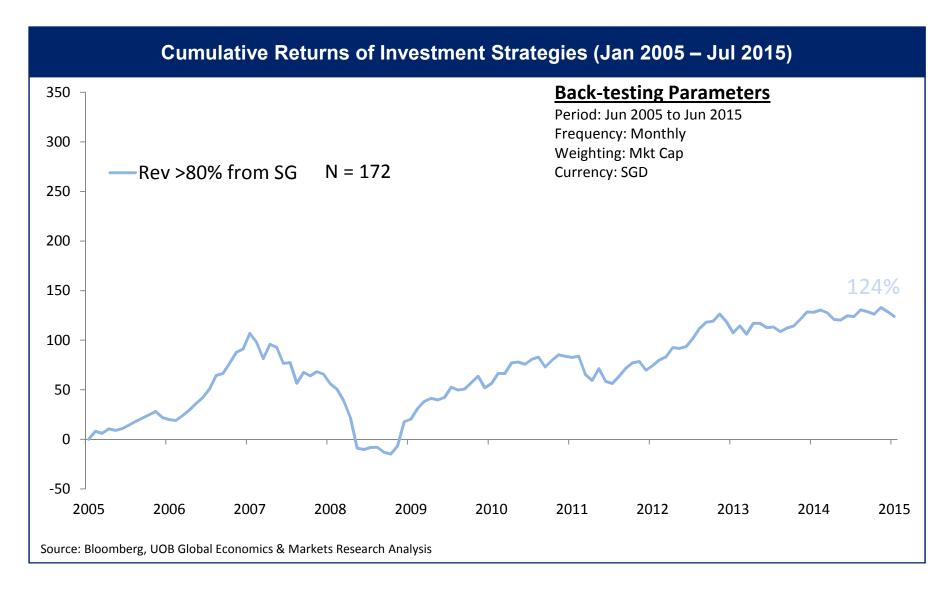
Impact of AEC Will Vary Across Sectors



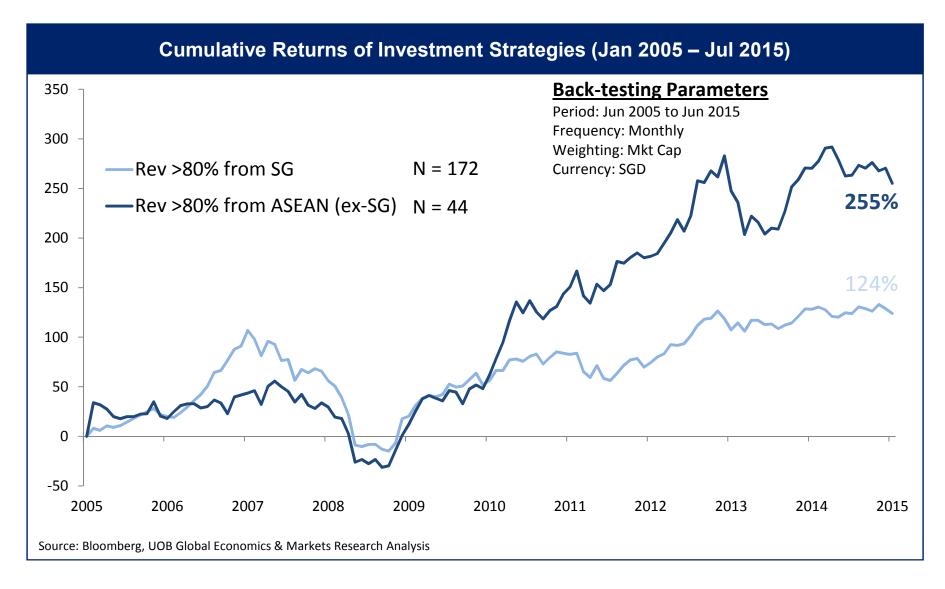
How Attractive Is It To Have An ASEAN Strategy?



SG-Strategy Generated 124% Total Returns



Twice The Returns For ASEAN-Strategy



Summary Statistics On Both Investment Themes

	N = 172	N = 44				
	Rev > 80% from SG	Rev > 80% from ASEAN (ex-SG)				
Return Statistics						
Total Return (%)	123.87	255.18				
Mean Return (%)	9.44	17.08				
Min. Return (%)	-8.07	-8.46				
Max. Return (%)	5.51	8.45				
Risk Statistics						
Std. Deviation	11.75	21.09				
Semi Variance	10.83	17.83				
Skewness	-0.59	0.24				
Risk/Return Statistics						
Sharpe Ratio	0.51	0.53				

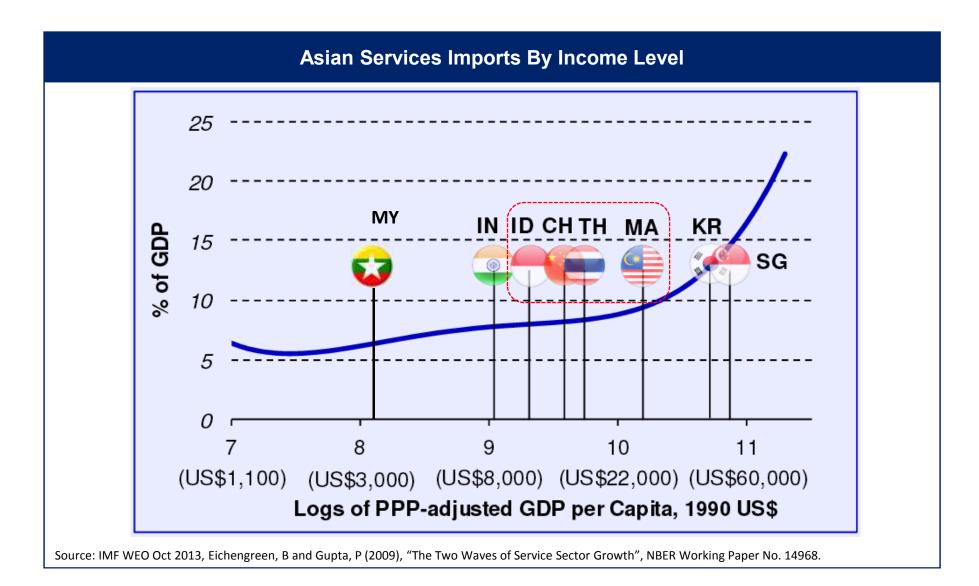
Source: Bloomberg, UOB Global Economics & Markets Research Analysis



So, Will Developed Countries Lose Competitiveness?

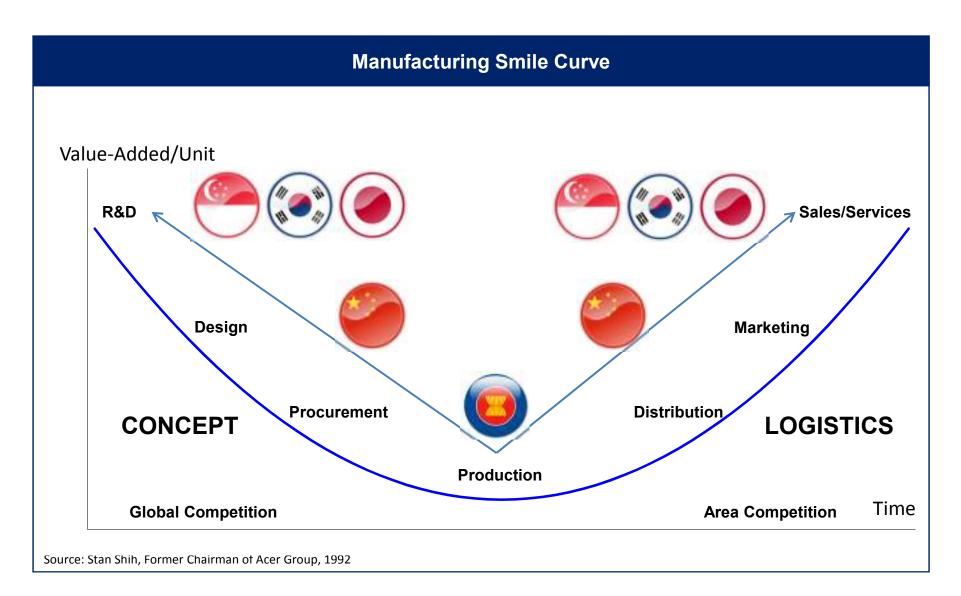


A Lot More Opportunities In Services Exports As Income Rises Across Asia





And Even In Manufacturing, You Can Specialise In Services!



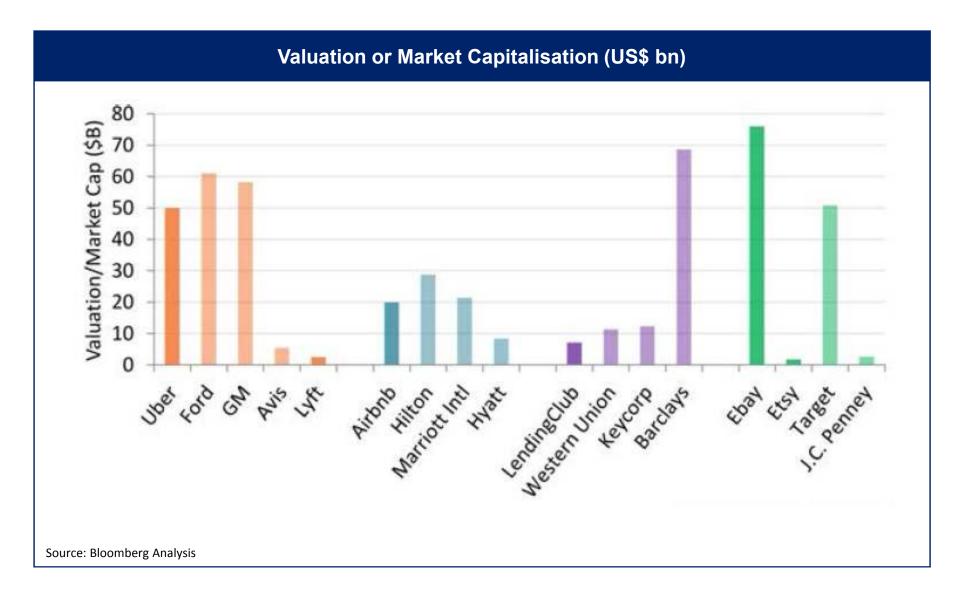


The REAL **BIG** Challenge For Corporates?





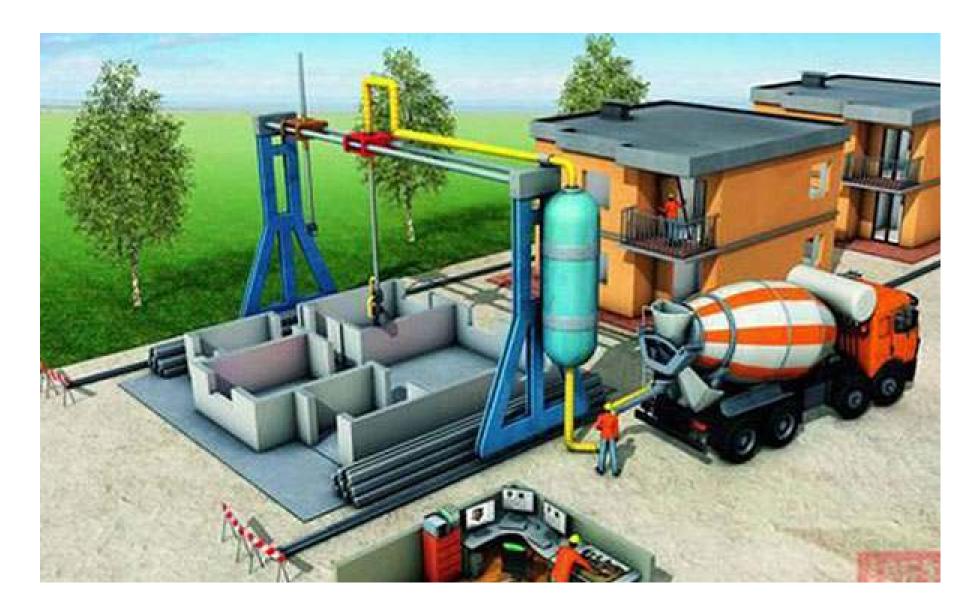
You Just Need An App To Start A Biz!.. And A BIG One!



Structural Disruptions To (almost) All Industries

Industries	% Share of GDP (2014)	Disrupters
Manufacturing	19%	Stratasys
Utilities	1%	SUNPOWER First Solar.
Wholesale/Retail	18%	Qoolo amazon.com 🔏 🛨 闷 🚺 1001NG
Tpt/Storage	8%	sharetransport.sg
Accomd/Food	2%	airbab roomorama 9flats.com
Infocomms	4%	Onapster .
Finance/Insurance	12%	
Biz Svcs	14%	gongo 99 designs MinuteWørkers where time really is money
Other Svcs	10%	SKILLSHARE SMICROFranchise.sg

* Not inside the list: Construction industry (5% share of GDP)



Question & Answer Session

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About The Speaker

Francis is an economist with United Overseas Bank's Global Economics & Markets Research team and covers macroeconomic research on Asia. He provides regular economics commentary on TV and is frequently quoted in the media. Before joining UOB in 2012, Francis was an investment strategist at Phillip Capital where he used macroeconomics, business cycle theories, market timing and technical analyses to develop a systematic top-down investment approach for discretionary portfolios. Prior to that, Francis served as an Investment Manager in the wealth management arm of the Royal Bank of Scotland. His career also included stints as an economist at the Ministry of Trade and Industry and the Singapore Tourism Board, where he specialised in Tourism Economics.

Francis obtained the Bachelor of Social Science (Honours) in Economics in 2002 and the Master of Social Science in Applied Economics in 2003 from the National University of Singapore. Continuing his academic interests in the field of applied economics, Francis most recently contributed a chapter titled "Tourism Demand in Singapore: Estimating Neighbourhood Effects" in the Handbook of Tourism Economics published in 2013, and had just published a paper titled "Growth and Environmental Quality in Singapore: Is There Any Trade-off?" in the "Ecological Indicators" journal in 2014.





Thank you