

Study



SOUTHEAST ASIA'S ECONOMIC OUTLOOK

The Big Picture

October 2015

A. Executive summary

Southeast Asia is an attractive territory: composed of 10 nations having gained independence relatively recently, it is characterized by conflicting trends. On the one hand, it is one of the fastest growing regions in the world in terms of economic growth, trade and investments, and on the other, many member nations still remain poor, plagued by severe socio-economic challenges.

In this paper, we analyze these contradictions from several perspectives: we look first at the overall geopolitical situation and future prospects of the region, looking ahead toward 2020, and subsequently drill down into several of the region's leading industries and analyze their current status and potential development opportunities: automotive, energy, steel and tourism. We then focus on 3 important markets within the region, namely the most populated (Indonesia), the wealthiest (Singapore) and the most dynamic in terms of development (CLMV – Cambodia, Laos, Myanmar and Vietnam).

The paper intends to offer a broad introductory overview of Southeast Asia for private and public sector organizations looking to establish a footprint in the region, without going into the details of any particular opportunity. With Roland Berger's extensive experience in the region, we are in an excellent position to develop specific strategies and plans for expansion opportunities.



Antonie Versluis

Managing Partner, Malaysia



Vincent Casanova

Principal, Singapore



Iman Azman

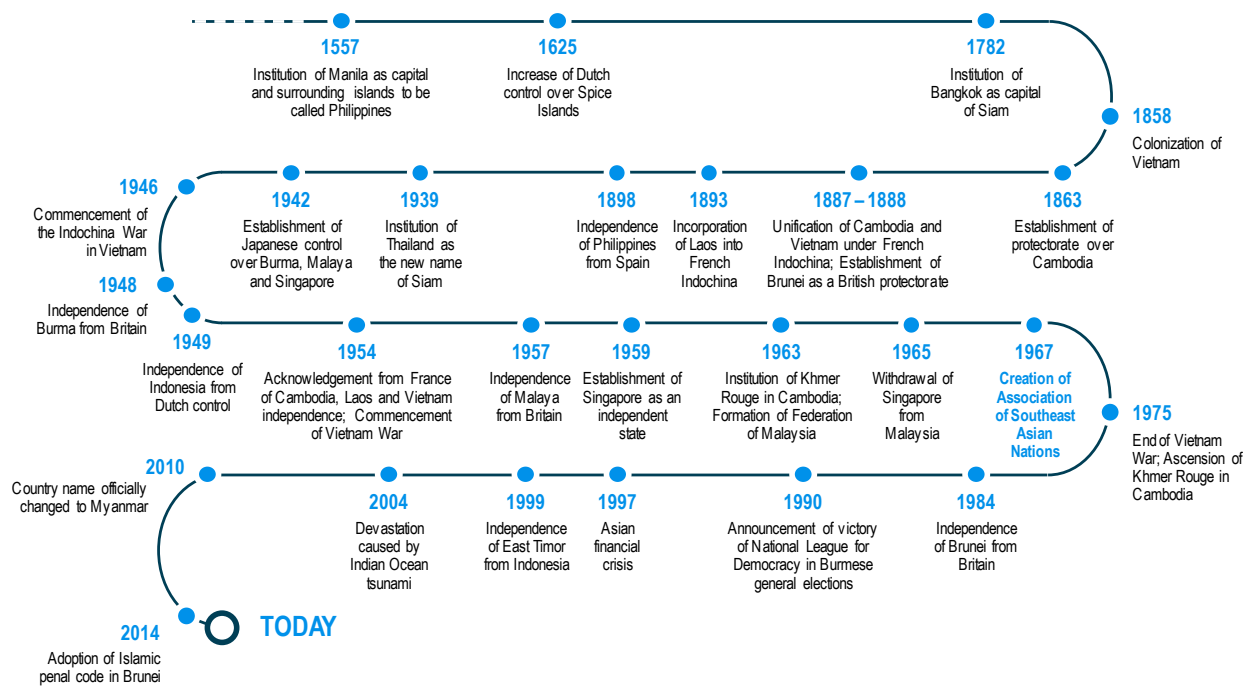
Consultant, Malaysia

Table of contents

- A. Executive summary 1
- B. Eyes on 2020..... 4
- C. Southeast Asia: a global contender..... 13
- D. Transport infrastructure: stuck in first gear 15
 - D.1 Road networks..... 16
 - D.2 Rail systems 17
 - D.3 Ports 18
 - D.4 Airports 18
- E. Automotive: counting down to the boom? 20
- F. Energy: seeking "greener" pastures 24
- G. Steeling ourselves to avoid downfall? 28
- H. Tourism: are we too optimistic? 32
- I. Indonesia: an awakening tiger? 34
- J. Singapore: at a crossroads 35
- K. CLMV: the backbone of Southeast Asia's future? 39
- L. Regional integration: is the EU a relevant model? 42

B. Eyes on 2020

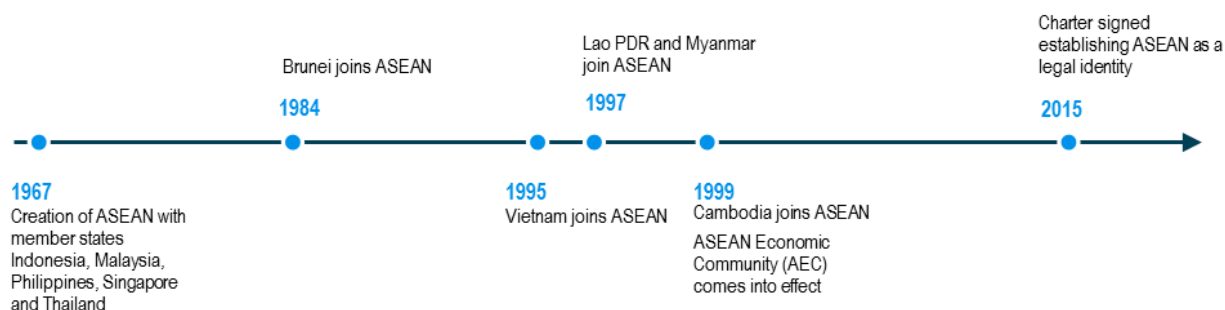
Figure 1: Southeast Asia's background



Source: BBC, Roland Berger

Southeast Asian nations are young, having only gained independence in the mid-20th century with the notable exception of Thailand. Indeed, almost all of the countries within Southeast Asia gained their independence in and around the 1950s, in line with the global trend in those decades in other regions, mainly Africa.

Figure 2: ASEAN history



The Association of Southeast Asian Nations (ASEAN) was established in 1967 with member states Indonesia, Malaysia, Philippines, Singapore and Thailand with the aim of fostering integration. It was meant to enhance regional resilience by promoting greater political, security, economic and socio-cultural cooperation. Furthermore, its goal was to create a single market and production base, which was to be stable, prosperous, highly competitive and economically integrated with effective facilitation of trade and

investment. ASEAN's aim was also to alleviate poverty and narrow development gaps between the countries through mutual assistance and cooperation.

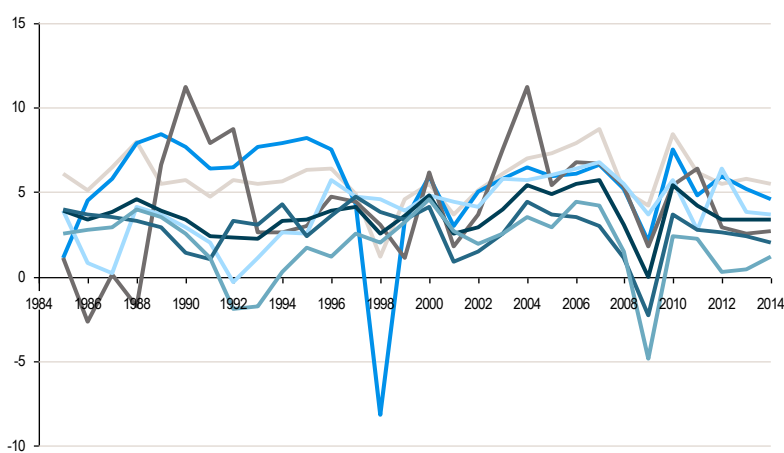
From a political perspective, its objectives were to strengthen democracy, enhance good governance and the rule of law, and promote and protect human rights and fundamental freedoms, with due regard to the rights and responsibilities of the member states of ASEAN. Another intention was to help the member states respond effectively, in accordance with the principle of comprehensive security, to all forms of threats, transnational crimes and transboundary challenges.

Long term, it aims to promote sustainable development so as to ensure the protection of the region's environment, the sustainability of its natural resources, the preservation of its cultural heritage and a high quality of life for its people.

Figure 3: Global economic growth

Global economic growth

Regional real GDP growth, 1985 – 2014 [%]



Geographic region	Average growth rate
Asia-Pacific	5.8%
Southeast Asia (average) ¹⁾	5.3%
Middle East	4.3%
Africa	3.9%
World	3.6%
Western Hemisphere	2.8%
Europe	1.9%

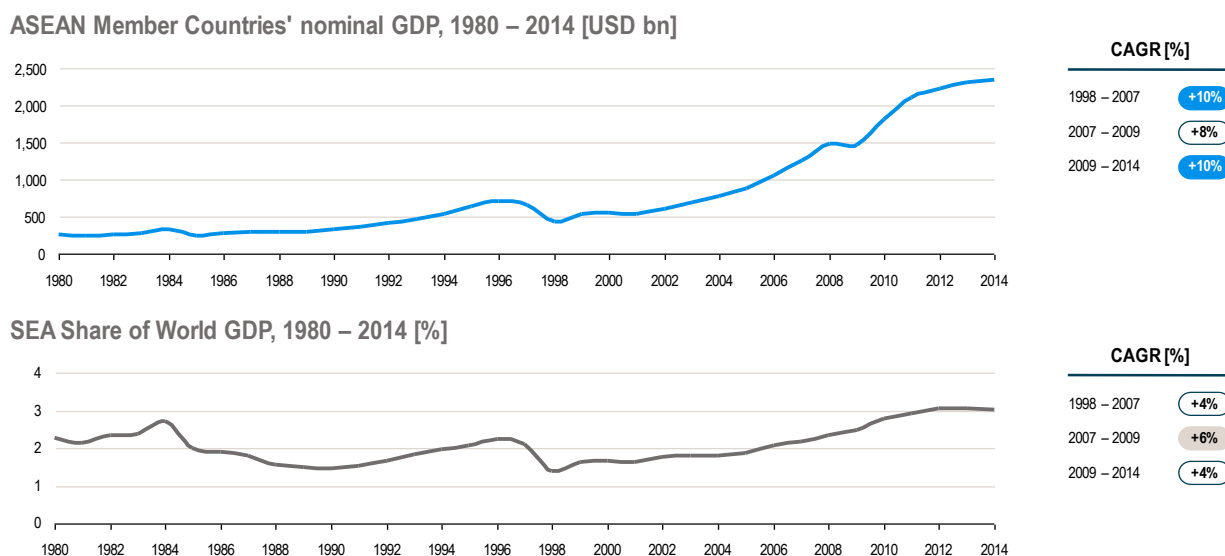
- Notes**
- > Asia-Pacific has seen the most stable growth as a result of strong developing economies such as China, India and ASEAN member countries
 - > Developed economies in Europe and in the Americas (Western Hemisphere) still have not recovered to pre-financial crisis growth rates
 - > Openness and flexibility of economies and diversified export structures have supported SEA growth over the past three decades

1) Real GDP growth data for Myanmar up to 1998 unavailable

Source: IMF, Roland Berger

In line with its targets, and despite the "booms and busts" in the global economy, Southeast Asia has indeed emerged as one of the fastest growing economic regions with an average real GDP growth rate of 5.3% over the last 20 years.

Figure 4: SEA's economic performance

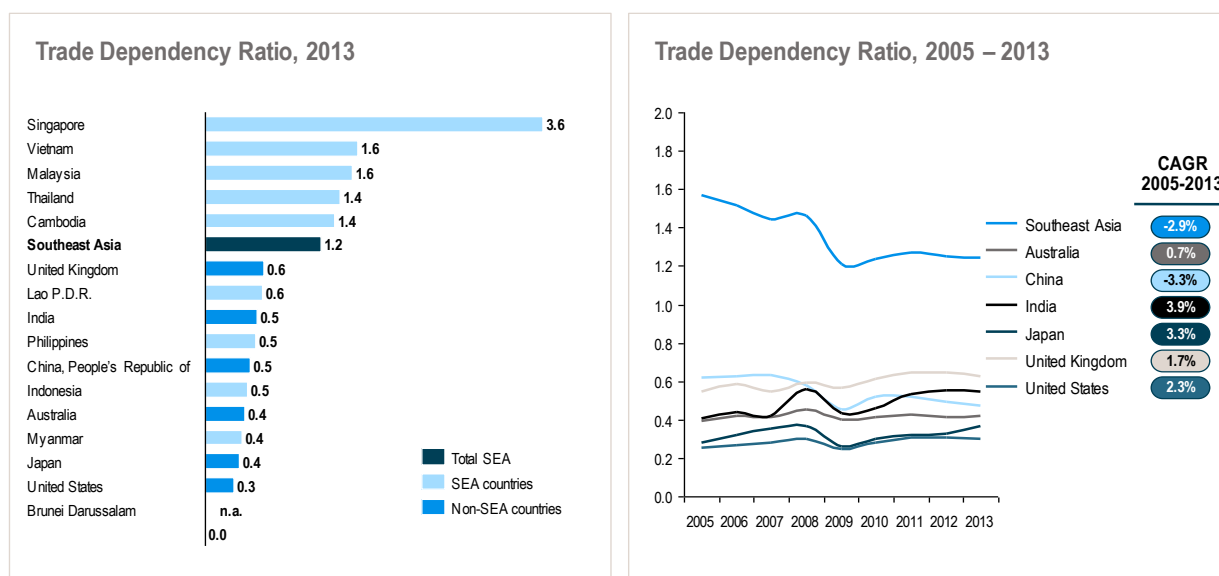


Source: IMF, Roland Berger

In the 10 years after the 1997/1998 Asian financial crisis, the region experienced accelerated growth partly due to flourishing export demand and competitive exchange rates. Though exposed to volatility and large swings in liquidity created by monetary easing policies in advanced economies, the economies within Southeast Asia still managed to grow, albeit at a slower rate, through the 2008/2009 financial crisis. It was in this period that regional economies seized a larger portion of world GDP as the center of global economic gravity shifted toward Asia.

However, the recent spike post-financial crisis could be a result of overheating and excessive credit growth due to the aforementioned monetary easing policies, which may weaken macroeconomic and financial stability.

Figure 5: SEA trade dependency¹⁾

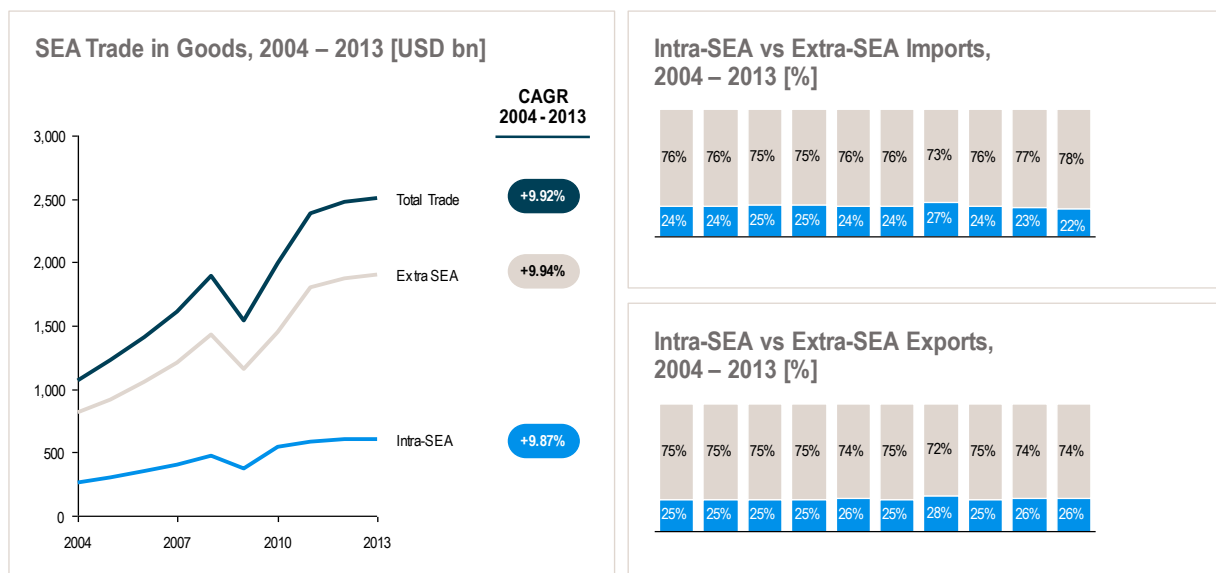


1) Trade dependency is equal to (Import + Export)/ GDP

Source: IMF, Roland Berger

Historically, the region relies heavily on trade, though the dependency has declined over the last 10 years. Singapore topped the trade dependency ratio ranking, followed by Malaysia and Vietnam in 2012.

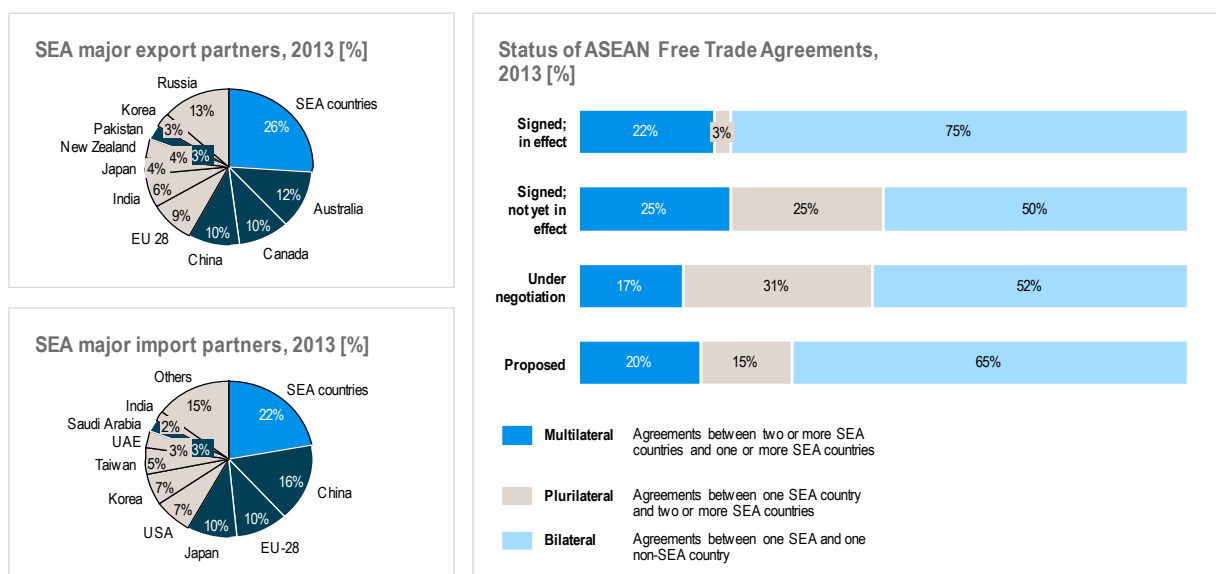
Figure 6: SEA trade overview



Source: ASEAN Stats Database, Roland Berger

Within the cluster of economies, trade continues to grow as efforts to boost intra-region trade gain momentum and external trade flourishes. Between 2004 and 2013, both intra- and extra-region trade grew at rates of nearly 10% p.a., with the latter remaining the dominant contributor to growth.

Figure 7: Extra-ASEAN trade

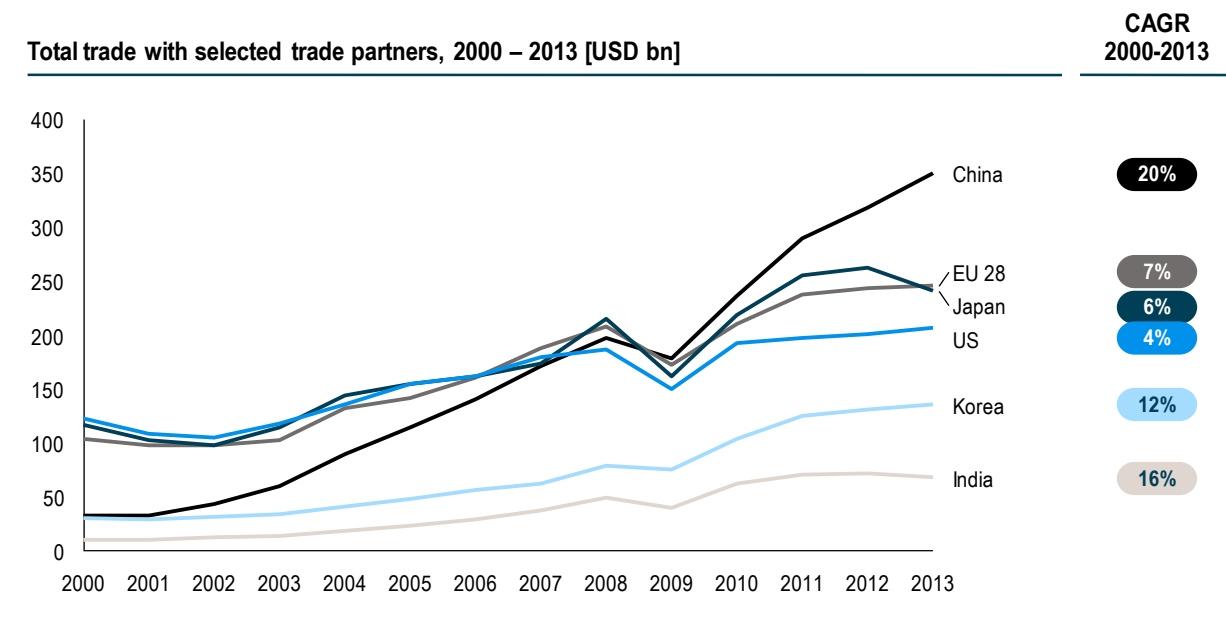


Source: ASEAN Stats Database, ADB, Roland Berger

In the aftermath of the Asian financial crisis in 1997, economies in the region intensified their efforts to bolster intra-region trade. But political agendas and vested interests have resulted in a rapidly growing number of free trade agreements with non-ASEAN countries that are outpacing internal agreements. By 2013, the vast majority of FTAs signed by Southeast Asian countries were bilateral and plurilateral,

emphasizing the desire to enhance trade with countries outside of the region, with Japan, Korea and China being the primary FTA signatories.

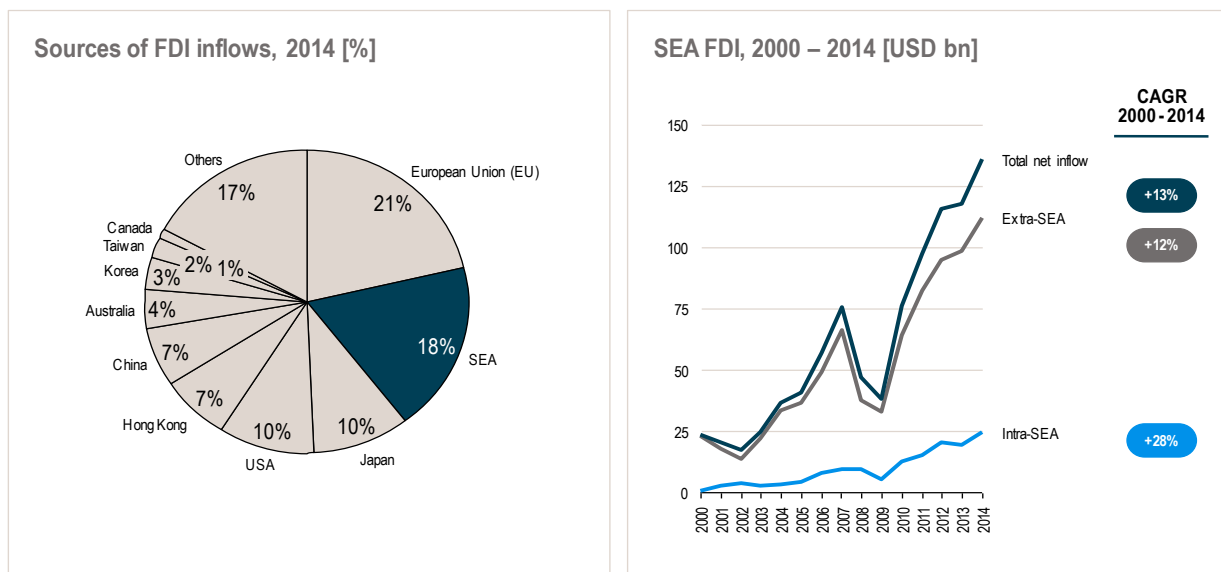
Figure 8: Trade partners with countries in Southeast Asia



Source: ASEAN Stats Database, Roland Berger

Unsurprisingly, China has surpassed any other country or region to become the primary trade partner for countries in the region over the past decade.

Figure 9: Share of foreign direct investment (FDI), both intra- and extra-region

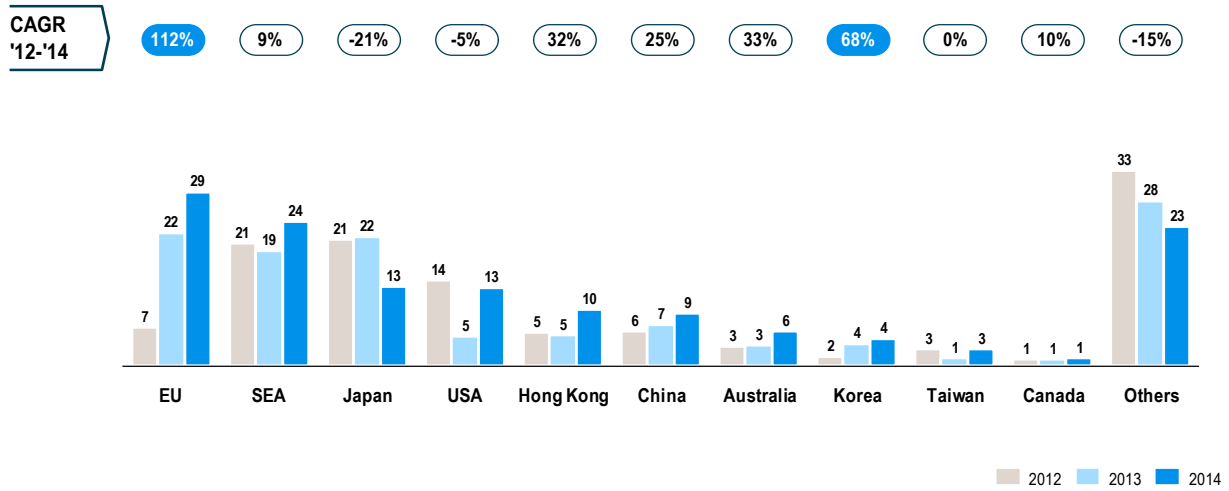


Source: ASEAN Stats Database, Roland Berger

From an investment perspective, countries outside the region have been the main FDI source, accounting for a total volume of more than USD 100 bn. The EU, Japan and the U.S. together contribute 41% of the FDI inflows to Southeast Asia, while intra-region investment alone contributes an 18% share.

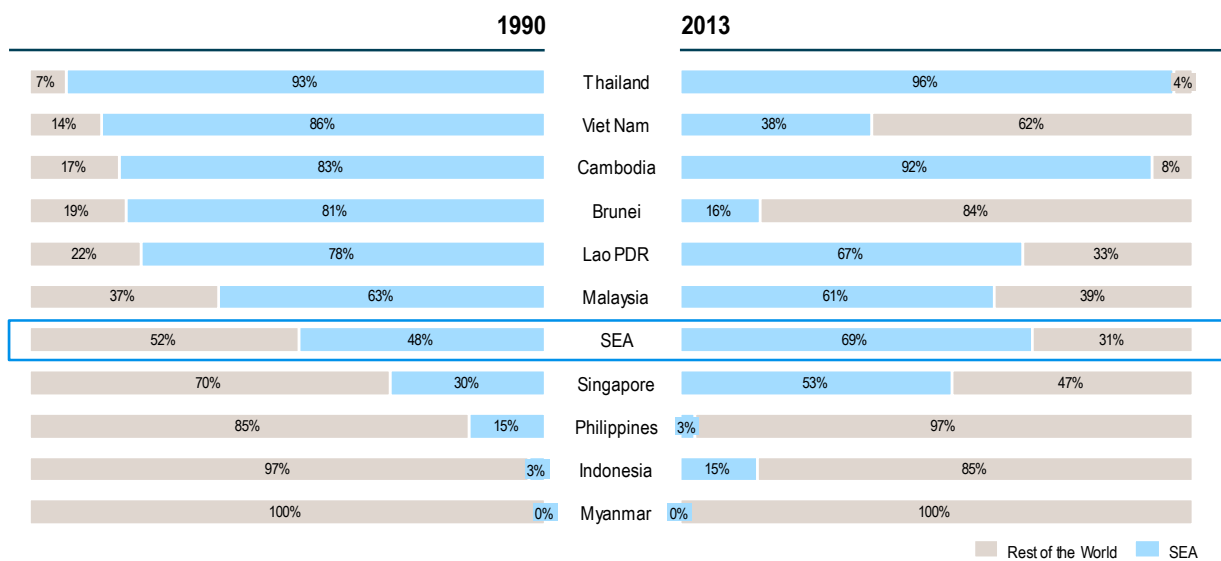
Figure 10: FDI inflow by source 2012 – 2014 (USD bn)

STUDY / Southeast Asia's Economic Outlook – The Big Picture



Source: ASEAN Stats Database, Roland Berger

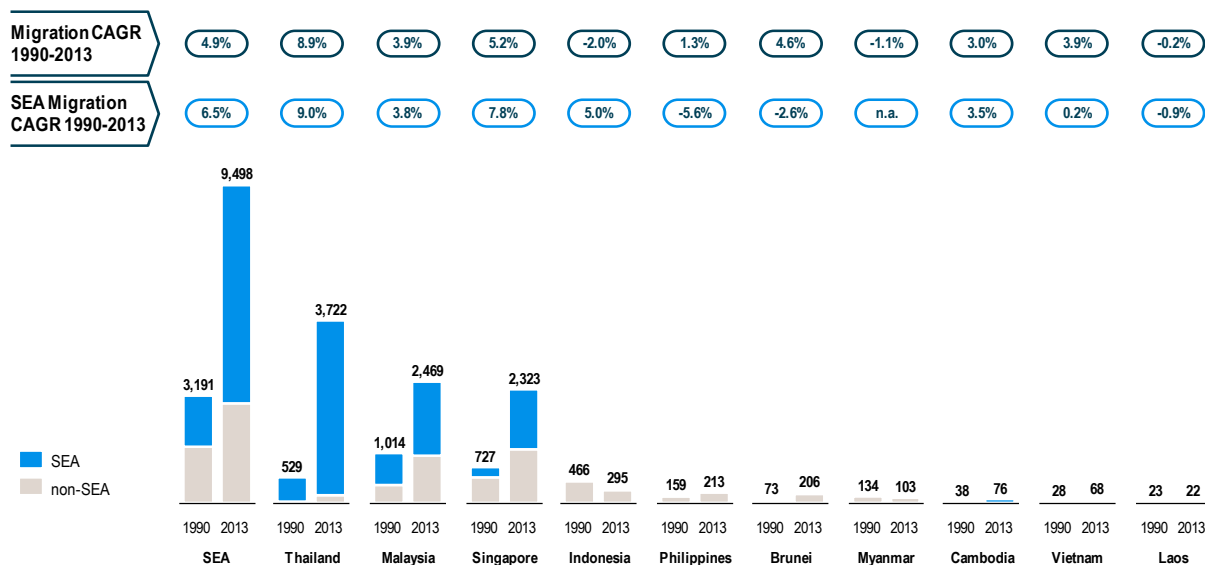
Figure 11: National migration by region of origin



Source: UN Migration, Roland Berger

Cross-border migration across various economies has grown significantly since 1990 aided by the Asian Economic Community (AEC) integration initiatives: 69% of the total migrants in the region were from ASEAN in 2013, compared to 48% in 1990.

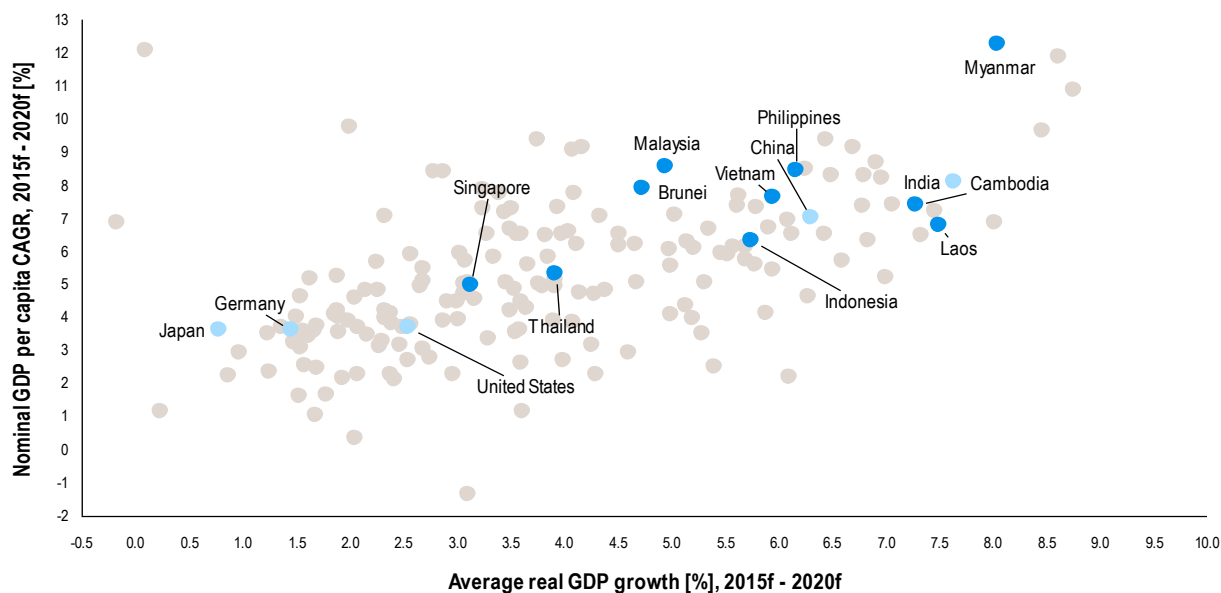
Figure 12: Migration by country ('000 people)



Source: UN Migration, Roland Berger

More than half of Southeast Asia has seen positive growth in intra-region migration, with Thailand as the leading destination, followed by Malaysia and Singapore.

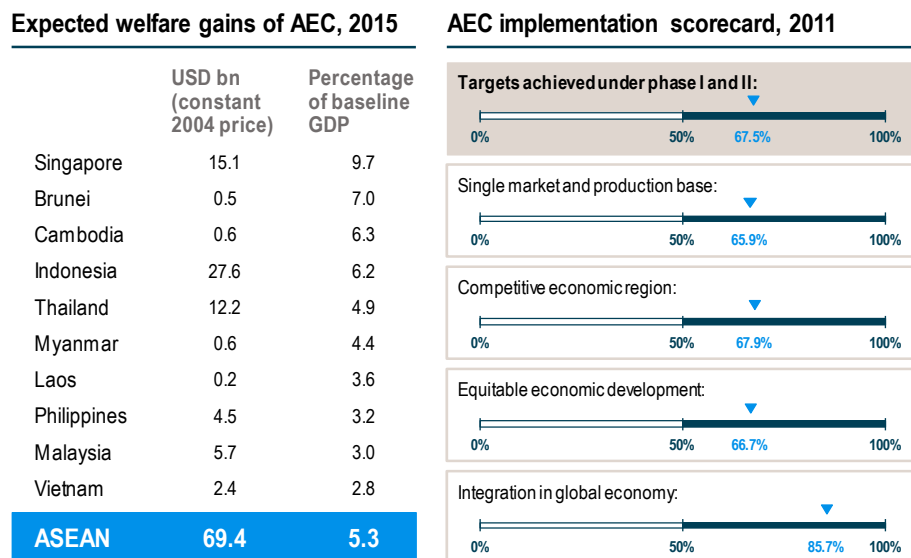
Figure 13: Southeast Asia 2020 outlook



Source: IMF, Roland Berger

Looking forward, the outlook for 2020 is promising for Southeast Asian economies, with strong growth expected in both total GDP and GDP per capita. Myanmar, Cambodia and Laos are expected to register the highest GDP growth rates but will also face challenges in remaining competitive as discussed later in this paper.

Figure 14: AEC assessment



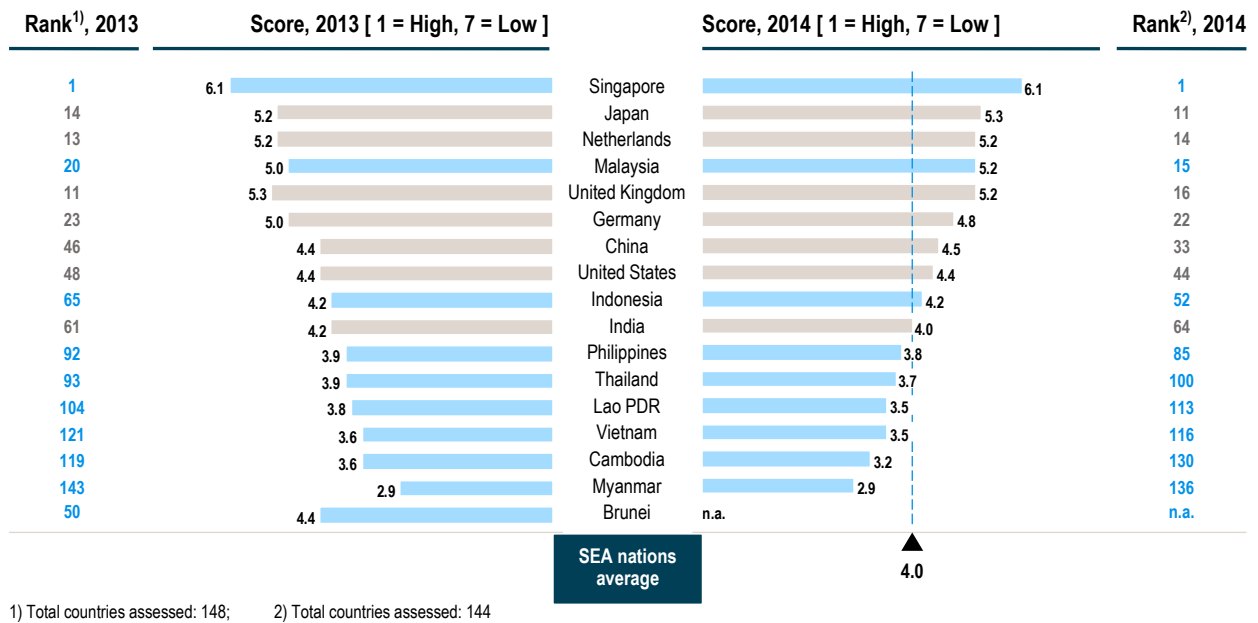
Source: The ASEAN Economic Community: Progress, Challenges, and Prospects (Chia, 2013), The Asian Economic Community: A Work in Progress (ADB, 2013), ASEAN Secretariat, Roland Berger

Initial expectations of the AEC's impact on SEA economies by 2015 were highly favorable. However, analysis has brought setbacks to light. This further highlights the inherent internal challenges that need to be overcome by the regional community as a whole:

- > *Low educational attainment and large unskilled workforce* – Lack of harmonized policies to manage the movement of skilled and unskilled labor creates problems in raising Southeast Asia's economic productivity to higher levels of competitiveness.
- > *Considerable development gaps among ASEAN member countries* – Pronounced disparities in governance systems and effective implementation of the rule of law is a challenge. There is also an absence of politically funded mechanisms to redistribute resources among member countries.
- > *Increasing risk of falling into the "middle-income trap"* – This is further accentuated by a loss of competitive edge in exports of manufactured goods that are perceived as low quality, reliance on foreign technologies, while failing to create sufficient incentives and an ecosystem for R&D and innovation.
- > *Vulnerability to external shocks due to high degree of openness* – Cluster economies remain vulnerable to external shocks as regional and economic interdependency deepens.

Figure 15: Transparency of government policymaking index

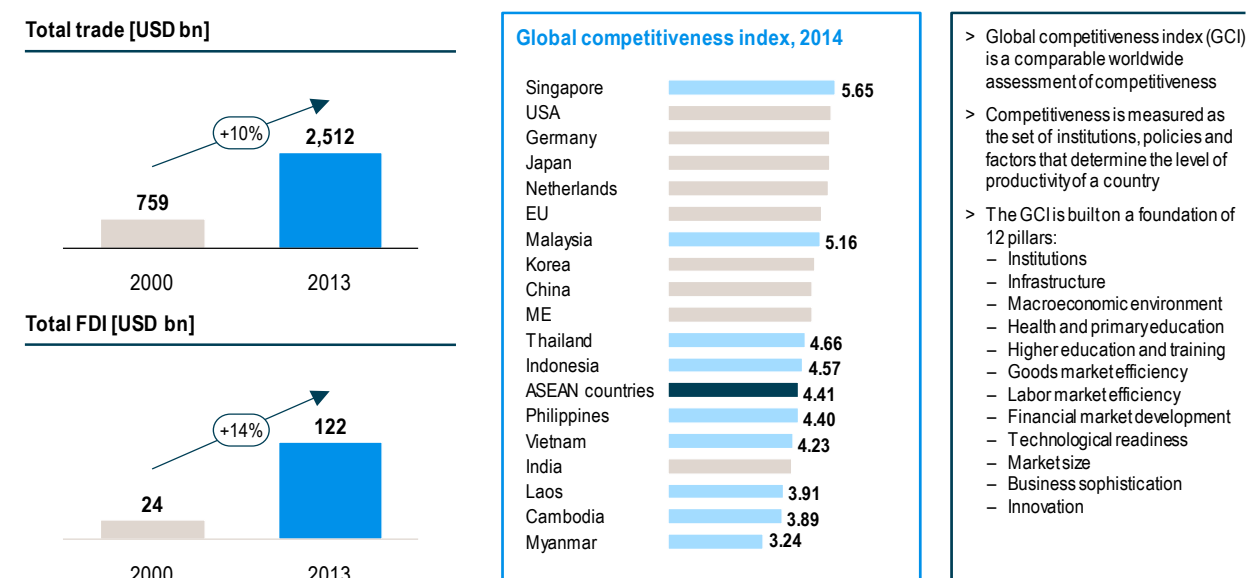
STUDY / Southeast Asia's Economic Outlook – The Big Picture



Source: World Economic Forum, Roland Berger

C. Southeast Asia: a global contender

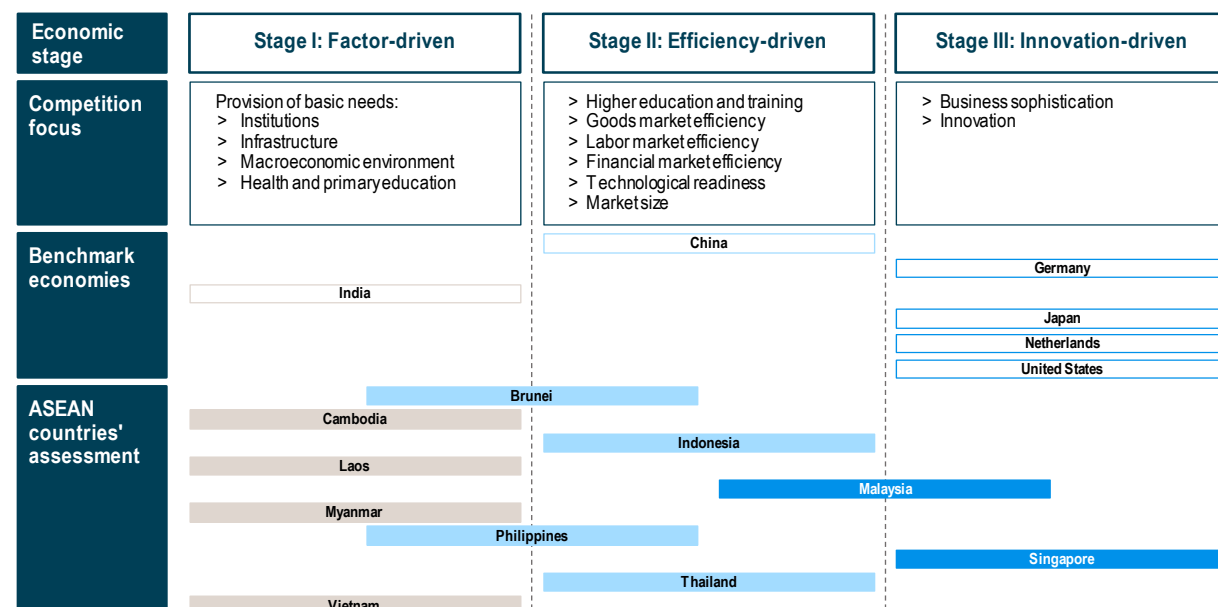
Figure 16: The region's competitiveness



Source: Global Competitiveness Report 2014 – 2015, Roland Berger

The regional economy relies on trade and FDI in order to increase its wealth, and improving competitiveness is critical to its future. Barring Singapore, there is still significant room for improvement for all ASEAN member nations.

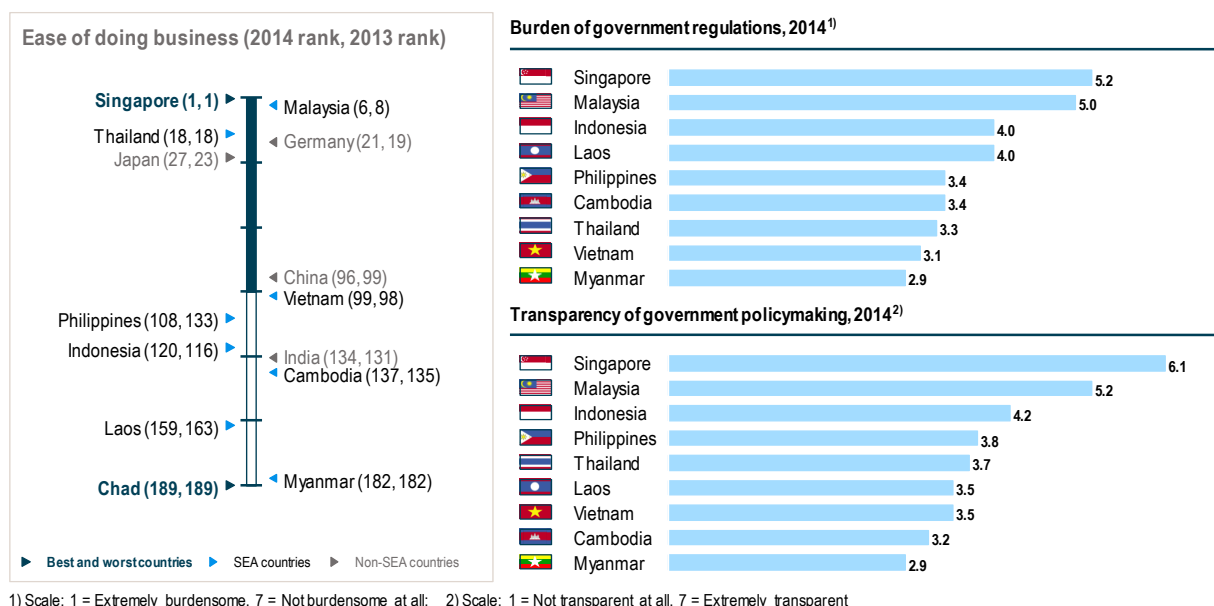
Figure 17: Economic stage assessment



Source: Global Competitiveness Report 2014 – 2015, Roland Berger

With the exception of Singapore and, in part, Malaysia, other countries are mainly factor- and efficiency-driven and should continue to develop their basic systems to achieve sustainable competitiveness. Only then can the region as a whole aspire to move toward being an innovation-driven ecosystem.

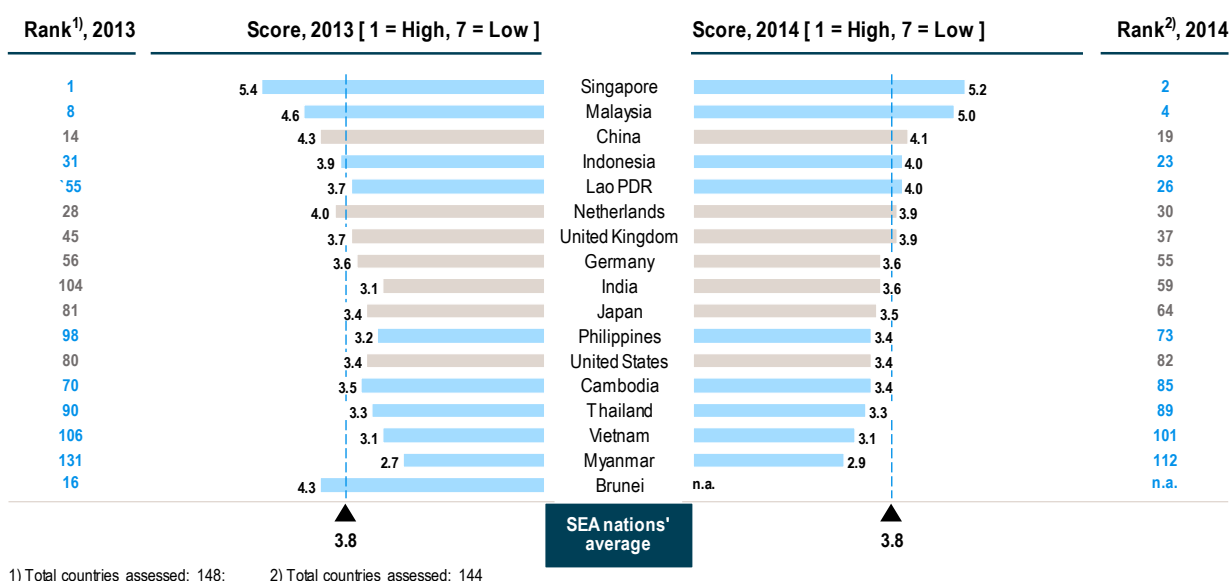
Figure 18: Selected measures of bureaucracy



Source: World Bank, World Economic Forum, Roland Berger

But bureaucratic challenges prevail for the majority of the region's countries, dampening the business attractiveness of the region. Apart from Singapore (ranked as the global number 1 since 2013) and Malaysia (ranked 6th in 2014), the remaining member countries are all outside of the top 15 in the world. The CLMV states (Cambodia, Laos, Myanmar, Vietnam), in particular, have a lot of catching up to do in order to capitalize on the economic growth potential on offer.

Figure 19: Burden of government regulation index



Source: World Economic Forum, Roland Berger

However, as the region positions itself from the perspective of bureaucracy, it's important to bear certain aspects in mind. Bureaucracy was initially introduced to root out corruption in a patrimonial system. As societies became wealthier and more complex, an inherent mistrust of bureaucracy developed. When applied wrongly, bureaucracy dampens business attractiveness through inefficiencies and subtle partiality as it is subject and liable to factors such as:

- > Time consuming multi-level processes
- > Biased political agendas
- > Exploitation of loopholes
- > Bureaucrat agendas
- > Exclusion of out-of-the-ordinary circumstances

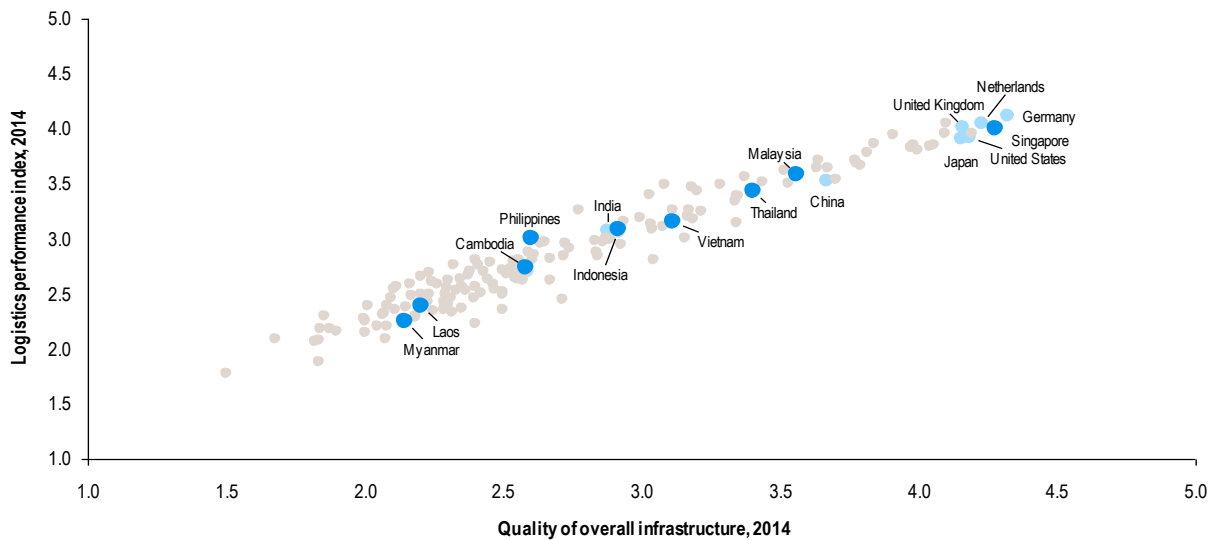
Conversely, it is arguable that bureaucracy is necessary as it forms the basic foundation of organization and provides formal rules that offer protection from the bias and prejudices of those in power, when applied correctly. Nonetheless, for countries in the region, the following questions still remain:

- > Should ASEAN member countries welcome bureaucracy as a region riddled with accusations of corruption?
- > If bureaucracy has its merits, do the nations have the right tools and mindset to impose it?

The answers to these questions will allow the region to chart its own path in becoming more efficient with greater government transparency and effectiveness.

D. Transport infrastructure: stuck in first gear

Figure 20: Logistics performance and infrastructure assessment



Source: World Bank, Roland Berger

Logistics performance in the region trails behind that of more developed economies such as Germany and Japan, as it correlates with the poor quality of overall infrastructure. Among ASEAN member countries, Singapore outperforms its peers the most, followed by Malaysia and Thailand.

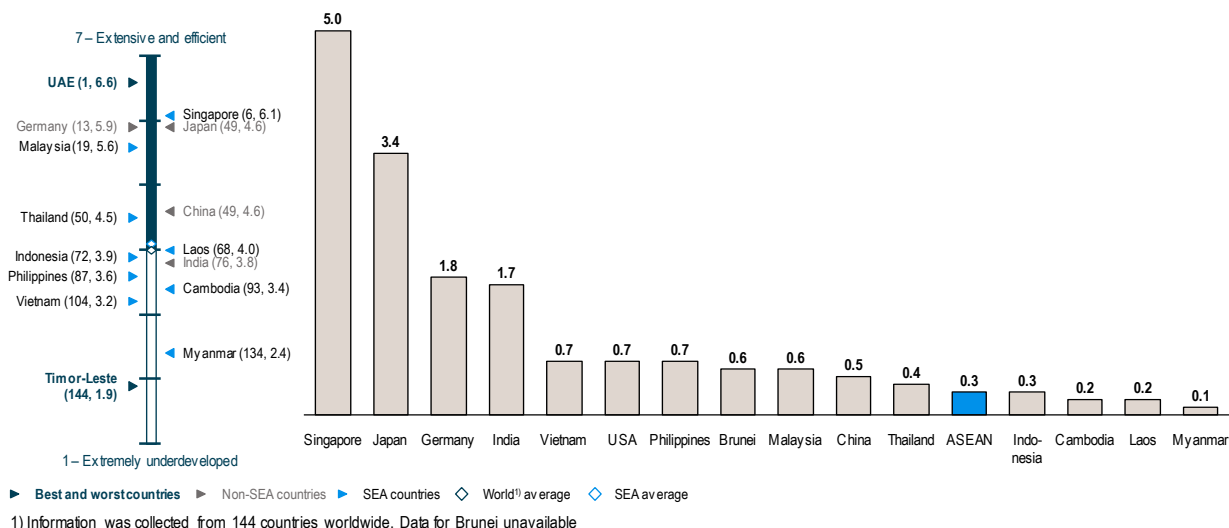
We have analyzed the quality of infrastructure from 4 different perspectives: quality of roads, railroads, ports and airports.

D.1 Road networks

Roads form the backbone of economic development. Recent developments including the establishment of a high-level master plan for regional connectivity and private external funding from China and other Asian countries, particularly in the CLMV nations, signal positive trends in the sector. However, efforts to improve the current state have been stifled by political friction. Some of the key challenges include disparities in the quality of roads from country to country, overcoming border security concerns and obtaining adequate joint financing for large cross-border projects.

Figure 21: Overview of roads

Quality of roads (rank, value) Road network density, 2014 (km/sq km)



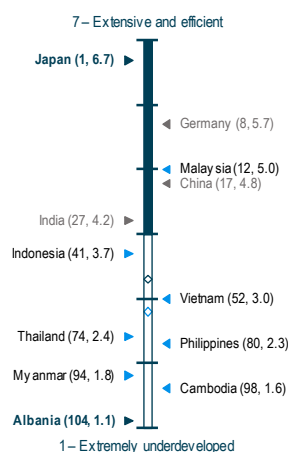
Source: World Economic Forum, World Bank, ASEAN Secretariat, Roland Berger

D.2 Rail systems

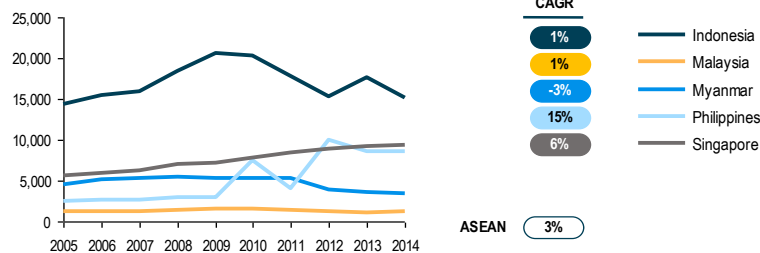
Development of rail systems has been less extensive, though urban rail and HSR projects have garnered considerable attention. Total passengers per kilometer in the region grew at a rate of 3% between 2005 and 2012, while total goods transported by rail within the region grew just 1% over the same period.

Figure 22: Overview of railroads

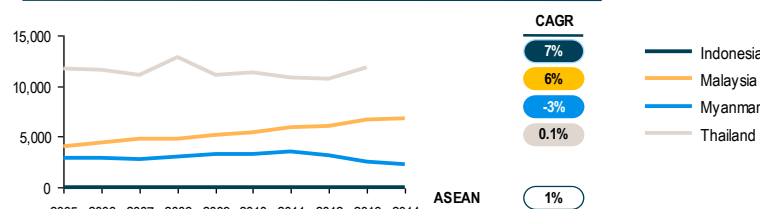
Quality of railroads¹⁾ (rank, value)



Total passengers per kilometer³⁾, 2005 – 2014 (m people/km)



Total goods transported on railway³⁾, 2005 – 2012 ('000 tons)



1) Not applicable to Singapore and Laos 2) Information was collected from 144 countries worldwide. Data from Brunei unavailable 3) Data unavailable/negligible for some countries

Source: World Economic Forum, ASEAN-Japan Transport Partnership, Roland Berger

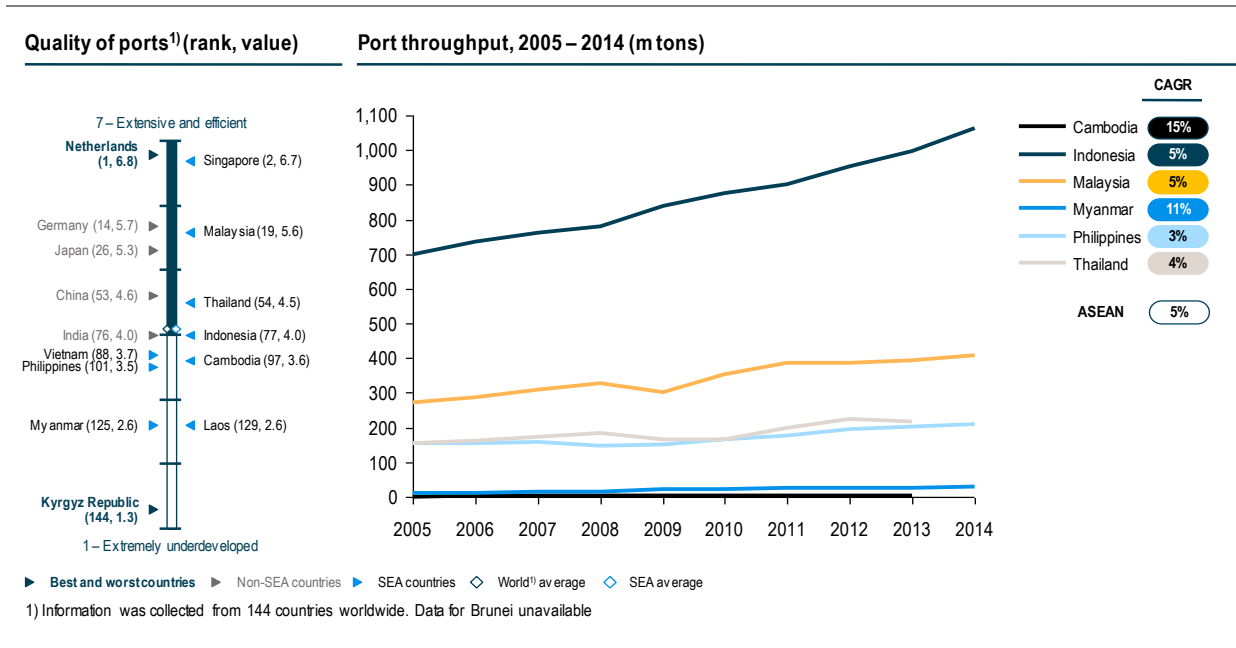
Key trends include a shift in focus to urban rail projects (e.g. MRT) as the urban population grows rapidly and cross-border high-speed rail works are undertaken in the wake of improvements in mutual trust between countries. But basic challenges will continue to impact the sector: decreasing reliance on

traditional rail transportation, extensive missing links in existing networks, and the geographical terrain in island nations like Indonesia and Philippines to name but a few.

D.3 Ports

The region's history as a trade-focused area is reflected in the growth of port throughput, though quality of infrastructure remains a concern across the region. Maritime transportation is now becoming a focus area on the national agendas of governments and internal initiatives have promoted healthy competition to improve maritime infrastructure and efficiency. Coping with the continued growth in demand and vessel sizes with the current infrastructure levels will remain a challenge.

Figure 23: Overview of ports



Source: World Economic Forum, ASEAN-Japan Transport Partnership, Roland Berger

D.4 Airports

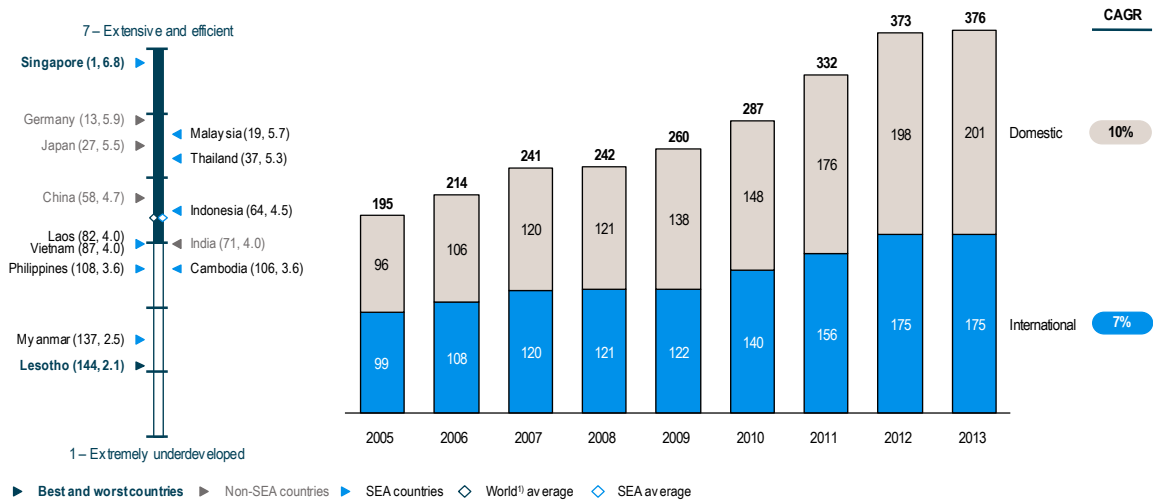
Air passenger traffic has grown tremendously since 2005, driven by both domestic and international passengers. Growing tourism interest in the region has prompted the need to provide adequate aviation facilities. Explosive growth of low cost carriers, particularly in intra-region travel, and open sky policies with the implementation of ASEAN's Single Aviation Market have further boosted the tourism industry. At the same time, the poor overall quality of many airports in the region and limited connectivity to countries like Laos represent challenges to the sector's growth.

Figure 24: Overview of airports

STUDY / Southeast Asia's Economic Outlook – The Big Picture

Quality of airports (rank, value)

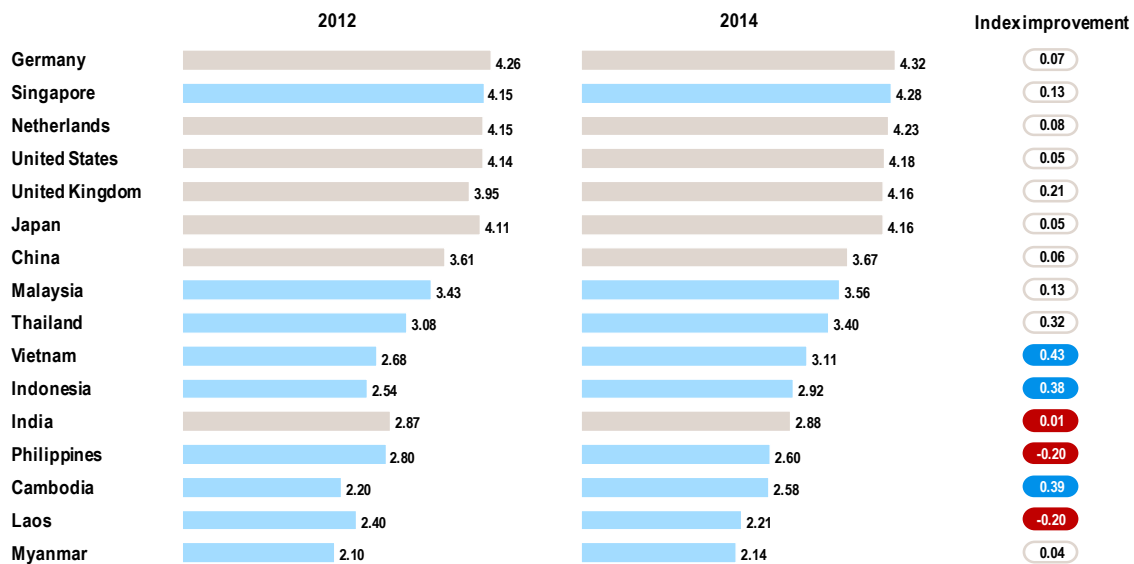
Passenger traffic [m people]



Source: World Economic Forum, ASEAN Stats Database, Roland Berger

To summarize, infrastructure connectivity remains a major hurdle for economic development in ASEAN and needs to be tackled with urgency.

Figure 25: Overall infrastructure assessment

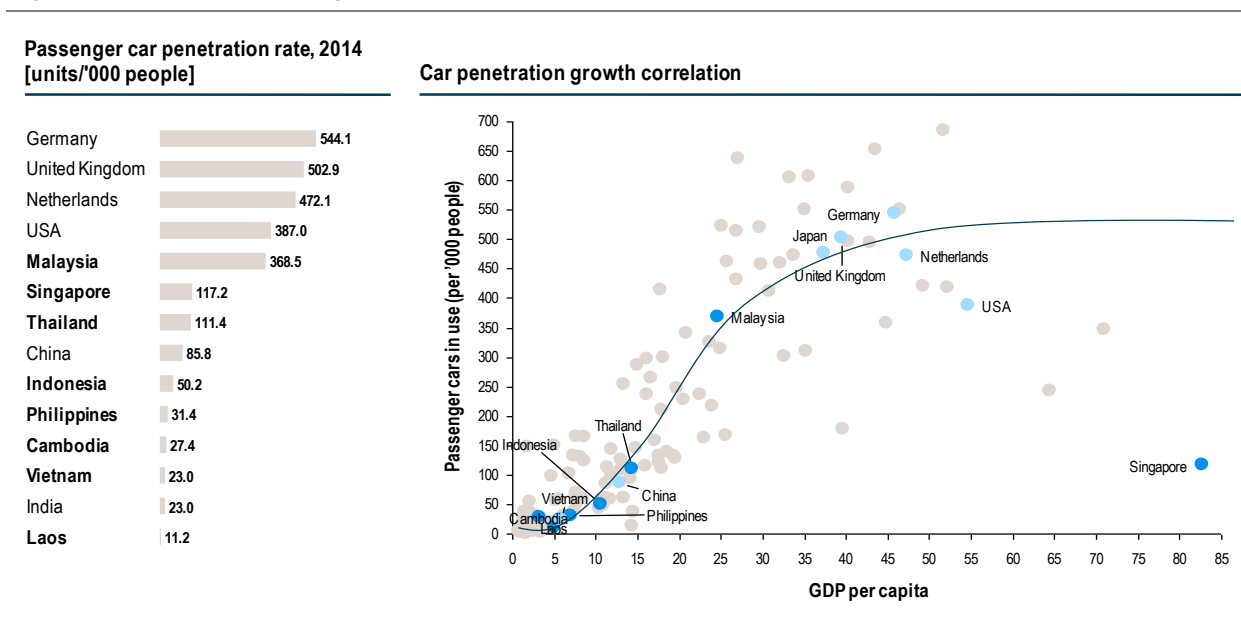


Source: World Bank, Roland Berger

E. Automotive: counting down to the boom?

With the notable exception of Malaysia, car penetration (calculated in units/1,000 people) is significantly low. However, there is a correlation between growth in car penetration and that of income levels as measured by GDP per capita. Most regional economies lie relatively close to this correlation curve and hence, it is expected that as their economies become more affluent, car ownerships will rise in tandem. This makes the prospect of a boom in car demand very strong in the region in years to come.

Figure 26: Automotive market global overview






Source: World Bank, ASEAN Secretariat, Euromonitor, Roland Berger

The case of Singapore is an anomaly and has to be viewed in a different context, the island nation having long restricted car ownership. The Singaporean government has issued a list of regulatory measures (high prices driven by import duties as well as buying the right to own a car, road taxes, defined lifetime of a car, among other things) to control and even reduce the number of cars plying its roads in view of its limited geographical size and the need to keep transportation decongested, safe and efficient.

Automotive producers have opted for different strategies to develop their industries. Thailand focuses on pickups and eco-cars and has created clusters, leveraging upon a strong export/import infrastructure. Indonesia has a stronghold on the MPV and truck markets and hosts a number of foreign OEMs, while Malaysia is more known for its small cars produced by local manufacturers.

Figure 27: Assessment of major auto producers

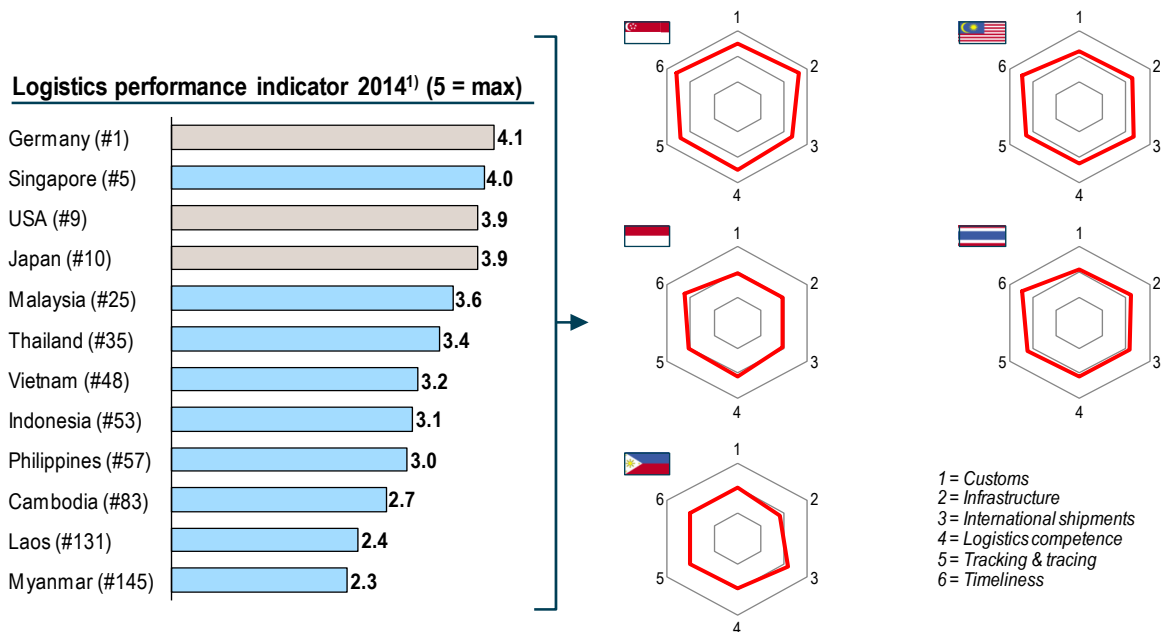
STUDY / Southeast Asia's Economic Outlook – The Big Picture

	 Thailand	 Indonesia	 Malaysia
Strengths	<ul style="list-style-type: none"> > Pickups and eco cars, trucks > Depth/clustering of auto industry > Export/import infrastructure > Industry policy 	<ul style="list-style-type: none"> > MPVs, trucks > # of foreign OEMs in the market > Labor cost > Local market demand 	<ul style="list-style-type: none"> > Small cars (Myvi) > Political stability > English language capabilities
Weaknesses	<ul style="list-style-type: none"> > Political stability > Free port capacity (Leam Chabang) 	<ul style="list-style-type: none"> > Road/port/train infrastructure > Export/import infrastructure > Lack of Tier 1/2 suppliers > Euro-2 as dominant fuel economy 	<ul style="list-style-type: none"> > Industry protectionism/overregulation > White-collar labor cost > Depth/dispersion/quality of industry > Local market size
Opportunities	<ul style="list-style-type: none"> > Attractiveness to foreign OEM/OES > Dawei deep sea port for export to EMEA > Hub & spoke strategy 'Thailand + 1' 	<ul style="list-style-type: none"> > Abundant local long-term demand > Rise of new middle class > Industry policy (LCGC – fuel subsidy elimination – infrastructure investment) 	<ul style="list-style-type: none"> > Local OEM and OES champions > Proton Euro-4 initiative to authorities > Destination of 75% of German luxury car exports to ASEAN
Threats	<ul style="list-style-type: none"> > Wage growth, particularly for engineers > Labor force peak before 2020, well before Malaysia and Indonesia 	<ul style="list-style-type: none"> > Cost competitiveness of local Tier 2 suppliers > Rising fuel and energy costs 	<ul style="list-style-type: none"> > Shortage of skilled labor > Rising energy costs, given reliance on gas and looming shortfall 2020+

Source: Desk Research; Roland Berger

Furthermore, production footprint is negatively impacted by the low logistics performance among most Southeast Asia nations, as measured by criteria like customs, infrastructure, international shipments, logistics competence, tracking and tracing, and timeliness.

Figure 28: Logistics performance review

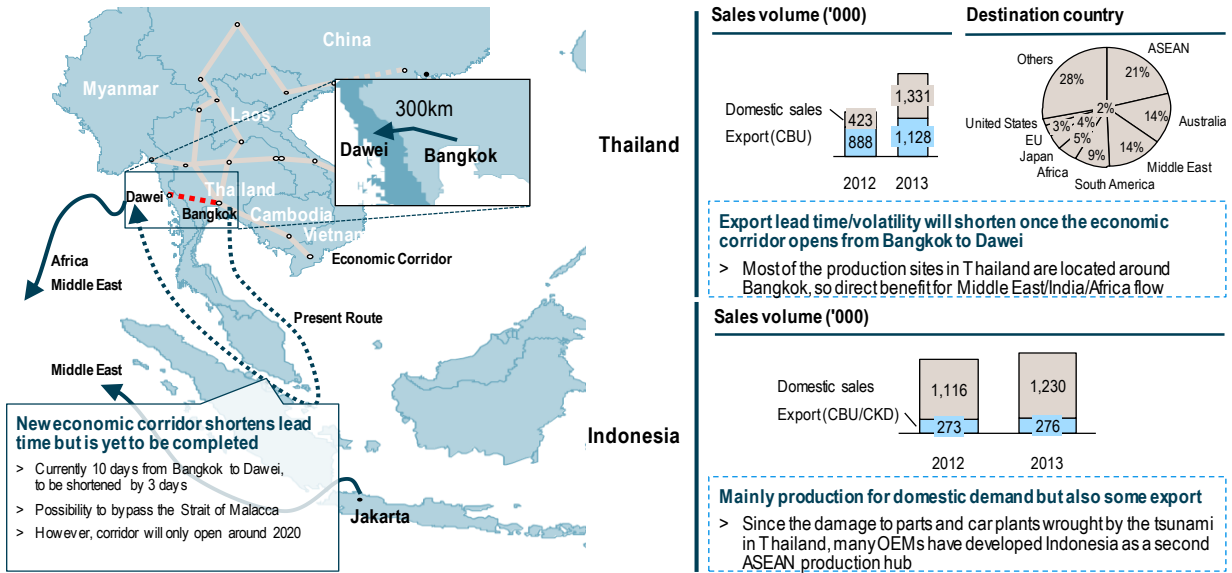


Source: World Bank LPI, Roland Berger

In response, the larger countries are taking active measures to improve the logistics situation to become production hubs for the region. Thailand, for instance, will open up a new economic corridor from Bangkok

to Dawei that will significantly reduce export lead times, especially from the large number of production sites located around Bangkok.

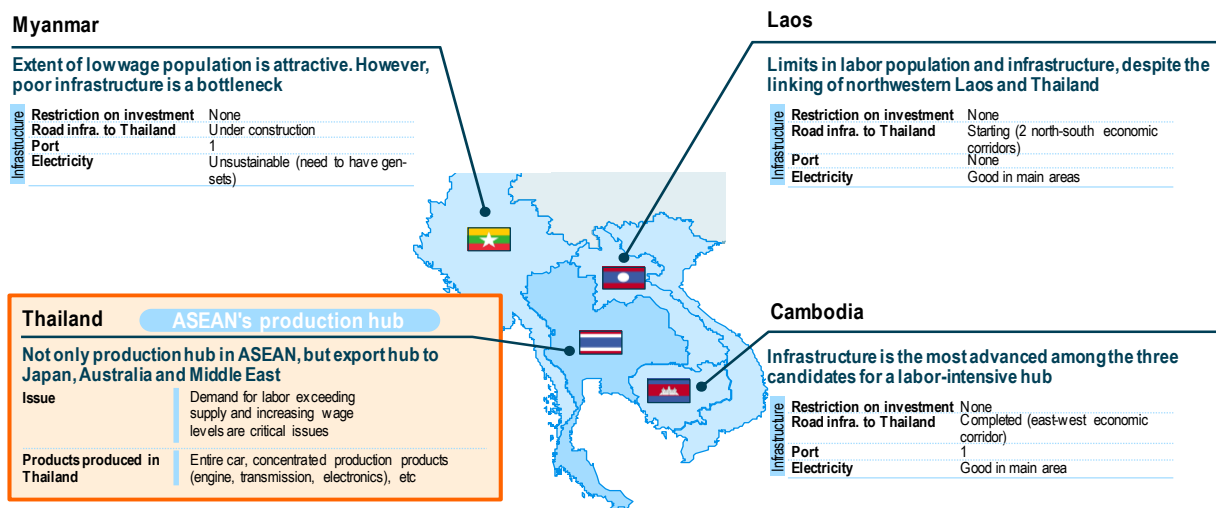
Figure 29: Production hubs



Source: Marklines, News, Roland Berger

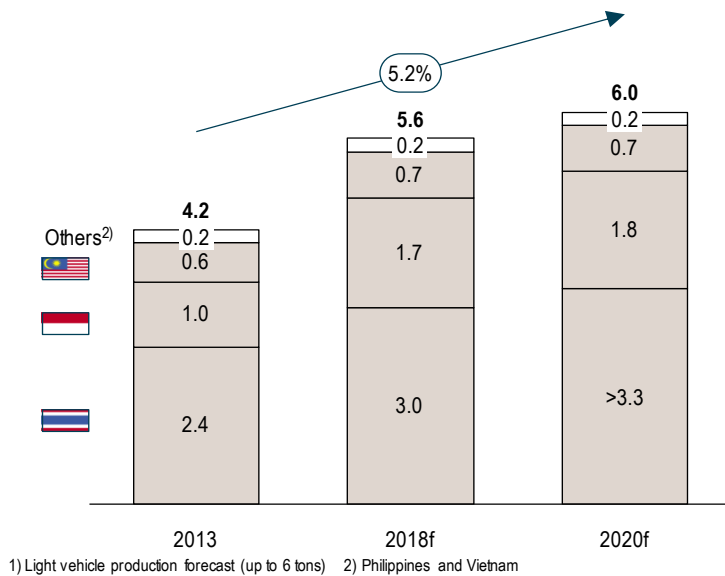
With Thailand dubbed the "Detroit of Southeast Asia", a Hub+1 footprint strategy is expected to further stimulate the automotive industry's development of the lesser developed neighbors Myanmar, Laos and Cambodia.

Figure 30: 'Hub+1' footprint strategy



Source: Nikkei Business (2013/05/13)

Figure 31: SEA LCV¹⁾ production capacity growth [units, m]



- > LCV production capacity growth mostly led by Thailand and to some extent also Indonesia. Potential international trends (e.g. green cars) also likely to become more popular among customers
- > Existing production lines (pickup, MPV) capacity foreseen to be roughly flat
- > Likely future management attention
 - Focusing existing production lines strongly on efficiency gains and quality optimization
 - Local players likely to push for further logistics optimization, thereby creating a virtuous circle for production enhancement

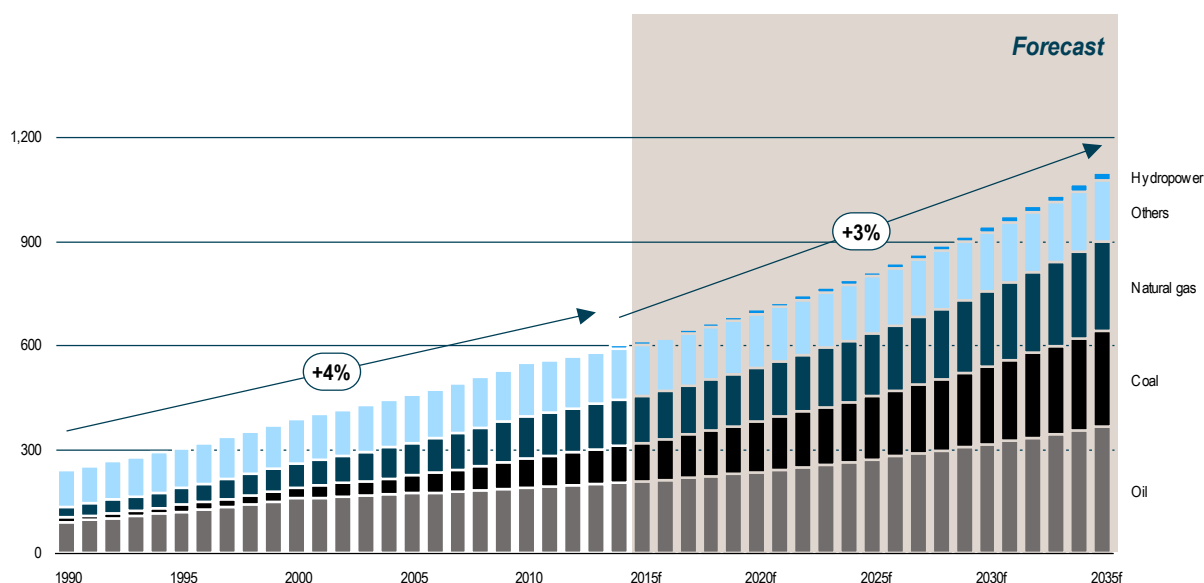
Source: Marklines; Roland Berger

Moving forward, the industry is expected to register growth of nearly 5% p.a. in the period through 2020, with management focus increasingly placed on achieving efficiency gains in existing production lines and optimizing the logistics networks in the region.

F. Energy: seeking "greener" pastures

Energy demand for the region is predicted to grow steadily over the 2015-2035 period at a pace of 3% p.a. Overall, the split between the main sources of energy is shifting toward coal, and this trend is likely to continue in the future. While in 1990, oil was the main source of primary energy, way ahead of other sources (37% vs. 13% for natural gas and barely 5% for coal), by 2035 the oil share is expected to gradually decrease to 33%, with coal accounting for a quarter of the demand and natural gas coming third with 23%.

Figure 32: SEA primary energy demand, 1990 – 2035f [Mtoe]

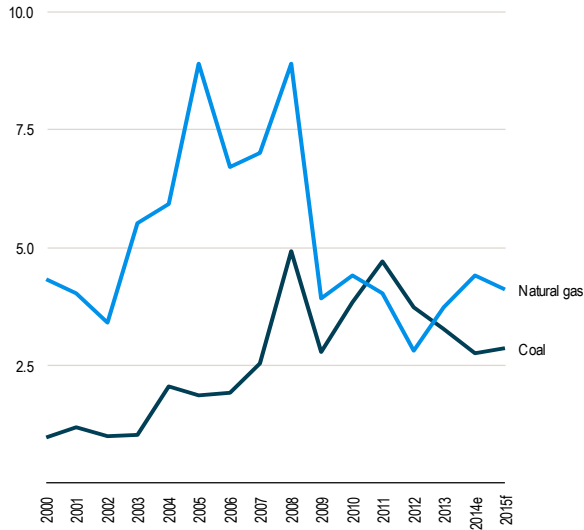


Source: ADB Energy Outlook, Roland Berger

- > Fossil fuels face challenges of their own in the region, prompting governments to explore new avenues in power generation.
- > Oil is characterized globally by volatile prices, heavily impacting Southeast Asian countries that are net oil importers. Moreover, countries in the region have long subsidized retail prices, creating strong fiscal burdens upon the national budgets. Only recently have nations like Indonesia and Malaysia started to address this politically sensitive topic through gradual reductions in subsidies.
- > Southeast Asia is richer in natural gas than it is in oil and the region is a key exporter of LNG in the global market. Nonetheless, availability of infrastructure and pricing regulations challenge the future prospects of this industry.
- > Coal continues to be a cheap and abundant resource in the region. It is estimated that existing coal reserves in Indonesia and Vietnam could be sufficient to sustain production for 80 years. However, protectionist measures like Indonesia's new ban on exports of unprocessed minerals could thwart the rapid rise of coal.
- > It is interesting to note that despite environmental benefits, natural gas is set to remain unpopular into the future as prices on average remain higher than those of coal.

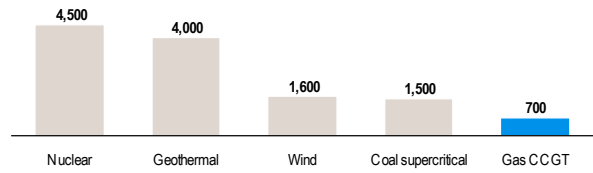
Figure 33: Natural gas for power generation

Natural gas vs. coal prices¹⁾ [USD/MMBtu]

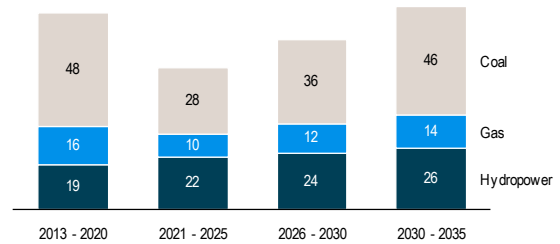


1) Conversion rate for coal: 1 ton of coal = 27.8 million Btu (American Physics Society)

Capital costs in power generation technologies, 2020 – 2035 [USD/kW]



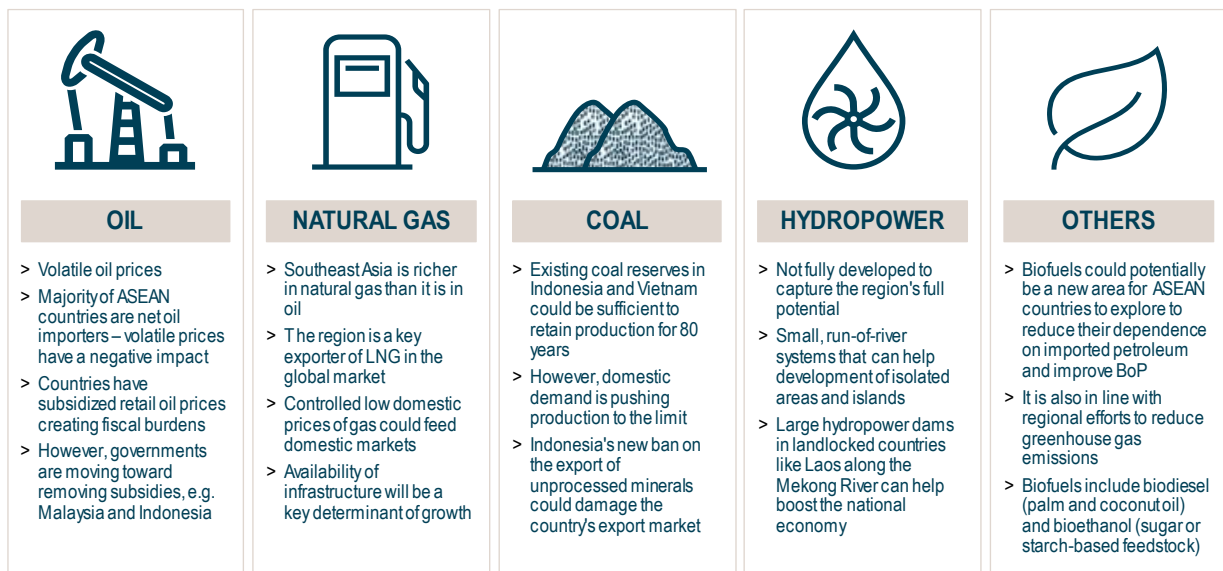
Estimated total investment in power generation capacity, 2013 – 2025 [USD bn]



Source: Southeast Asia Energy Outlook, Roland Berger

In this context, governments are increasingly seeking renewable energy opportunities to diversify away from reliance on fossil fuels and also support green development. Regulators are adopting energy mix policies that support renewable energy development, with most countries having laid down targets for increasing their share of renewables in power generation.

Figure 34: Energy sources in Southeast Asia



Source: ADB Institute, International Energy Agency, Roland Berger

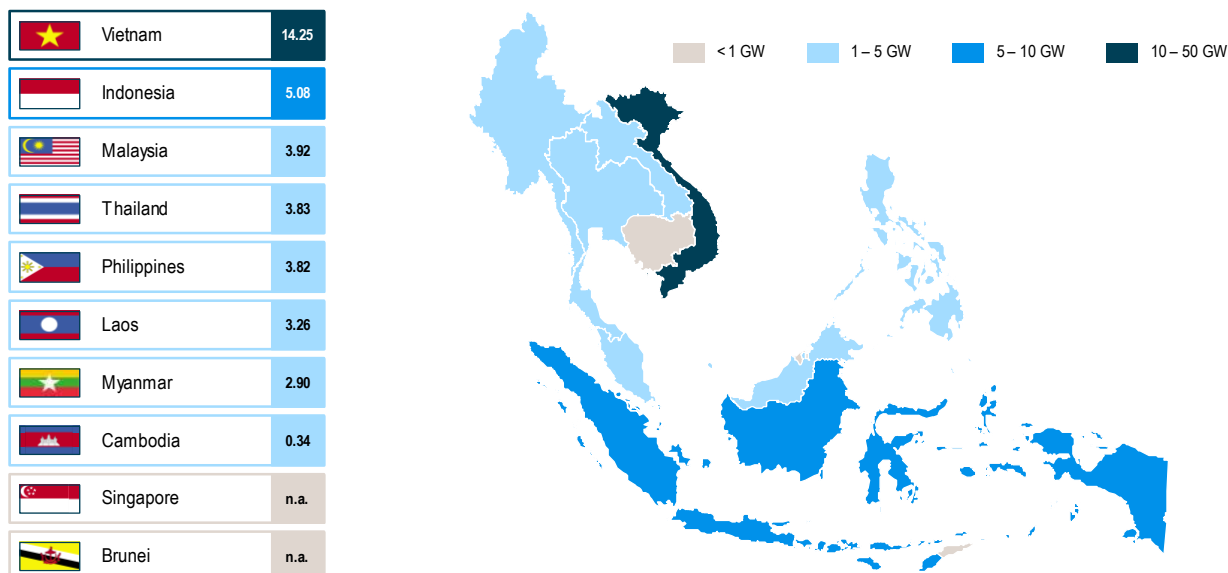
Figure 35: Energy mix policies by country

Country	Non-renewable energy			Renewable energy				
	Coal	Oil	Natural gas	General	Biofuels	Nuclear	Hydropower	Geothermal
Cambodia				> 15% of generation from RE			> Develop HP to lower domestic cost of power	
Indonesia	> Increase to >30 of mix by 2025	> Reduce to <25% of mix by 2026	> Reduce to 22% of mix by 2025	> Increase to >23% of mix by 2025	> 5% of primary energy mix by 2025		> HP to account for 11% of total power capacity	
Laos				> Increase share by 30% by 2025	> 10% share in transport by 2025		> 5 GW of HP capacity by 2015	
Malaysia				> Increase RE share to 13% by 2030		> Long-term option		
Myanmar				> 15-18% of power generation by 2020				
Philippines			> 30% vehicle use by 2030				> Main RE use growth driver	> Main RE use growth driver
Singapore				> 5% 2020 peak electricity demand				
Thailand			> Reduction in share of natural gas	> 25% of consumption by 2021		> Introduction in 2026		
Vietnam				> 5% of power generation by 2020		> Source of energy by 2030		

Source: Southeast Asia Energy Outlook, Roland Berger

Although relatively small compared to the share of other resources, hydropower has gained strong traction in Southeast Asia, with Vietnam at the forefront of its implementation owing to the existence of natural resources and the active support of its government.

Figure 36: Installed hydropower capacity, 2013

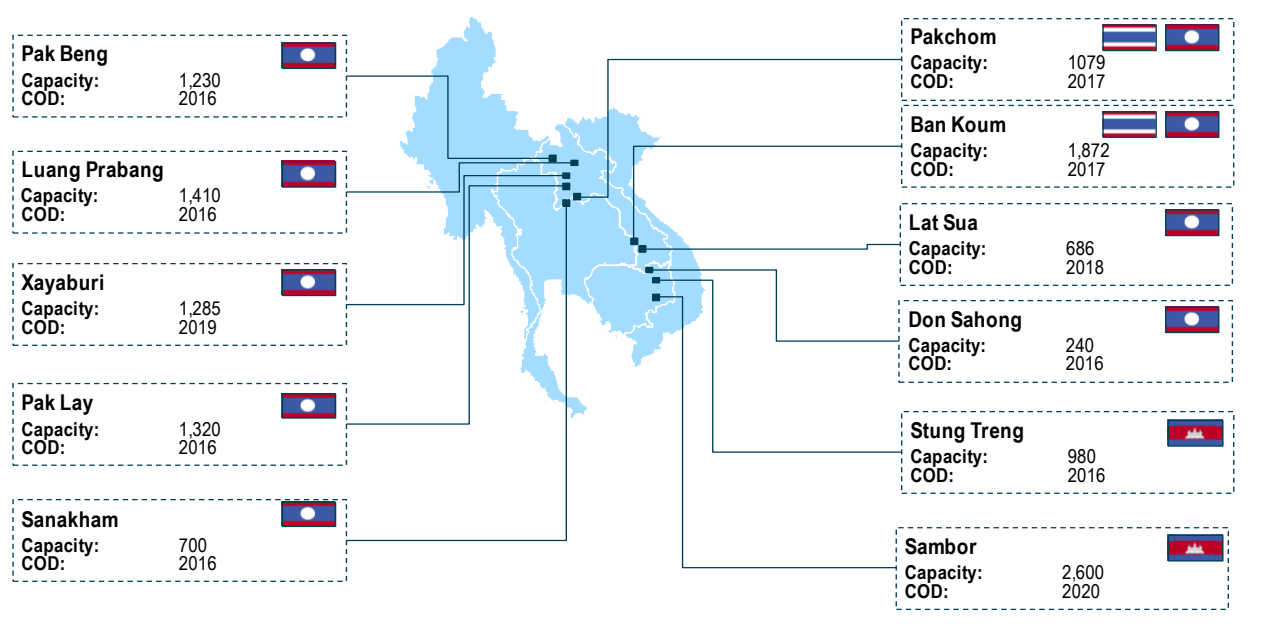


Source: International Hydropower Association, International Energy Agency, Wall Street Journal, Roland Berger

Southeast Asia boasts considerable hydropower potential, mainly concentrated along the Mekong River, to the tune of 30-60 GW. Significant projects have been announced in the Mekong basin, proposing to add nearly 13 GW over the next 2-4 years on top of an existing capacity of 37 GW in the region. However,

opposition from environmental groups and limited financial resources have so far stifled efforts to fully develop this energy source, and governments are exploring alternative funding mechanisms including PPPs for the construction of dams and other facilities.

Figure 37: Hydropower capacity additions in the Mekong basin, MW

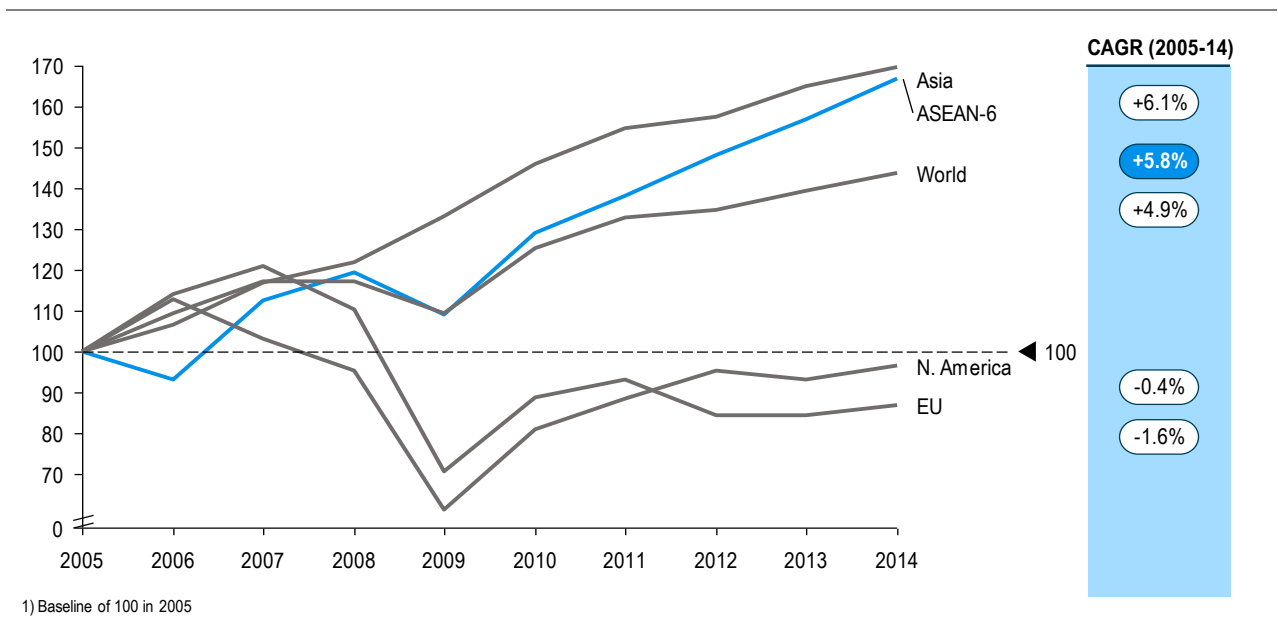


Source: Press Research, Roland Berger

G. Steeling ourselves to avoid downfall?

Asia has been the main engine of growth in global steel demand over the past decade, driven by strong demand in the construction, automotive and machinery sectors, particularly in China. In fact, the industry remained unscathed even by the global financial crisis, in stark contrast to its Western counterparts where demand declined sharply in 2009. ASEAN-6 – comprising ASEAN and six other nations (China, India, Japan, South Korea, Australia and New Zealand) – has shown relatively strong growth as well over the past decade, clocking nearly 6% annually.

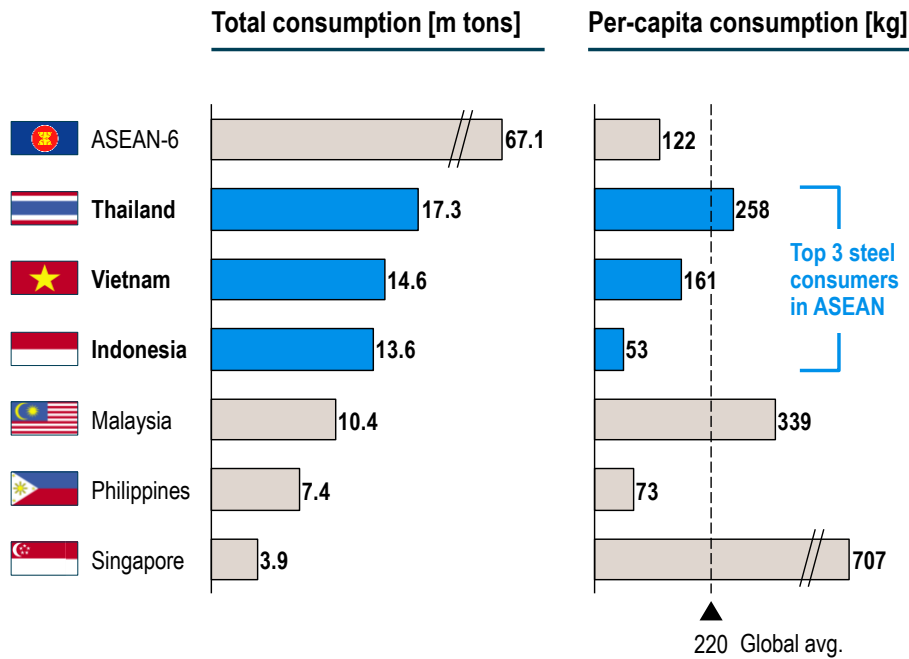
Figure 38: Apparent steel use (finished steel)



Source: World Steel Association; Roland Berger

Indonesia, Vietnam and Thailand are the biggest consumers of steel in the region, accounting for nearly 2/3 of total demand. However, per capita steel consumption in ASEAN-6 is only half of the global average – in Indonesia it's only 1/4 – suggesting much more scope for growth in the region.

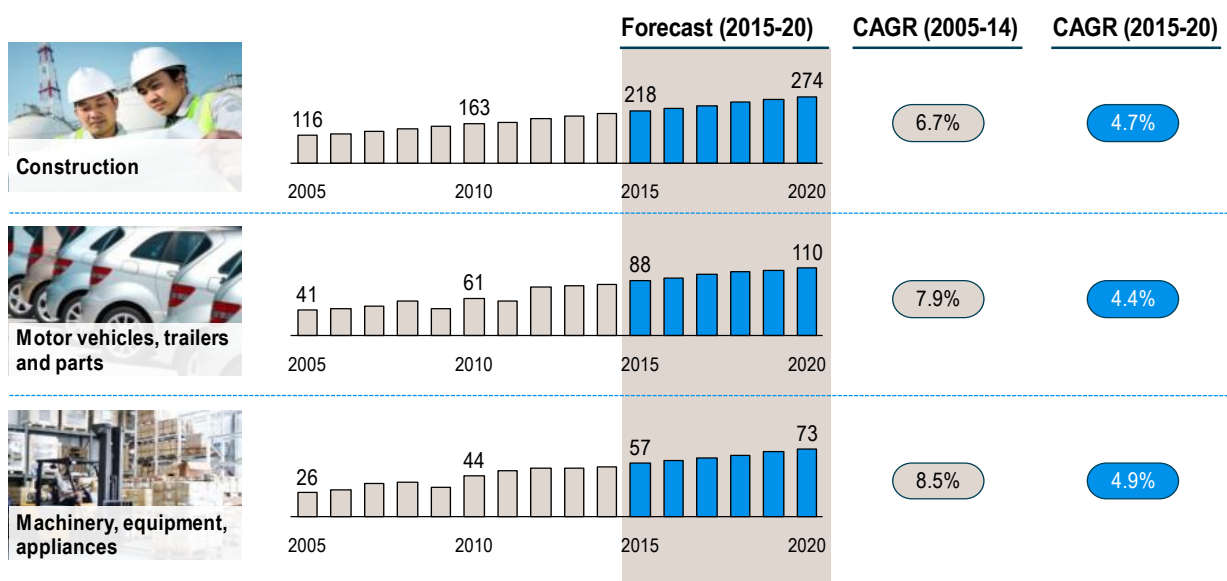
Figure 39: Apparent steel consumption by country, 2014



Source: South East Asia Iron and Steel Institute (SEAISI); Roland Berger

Looking forward, the region is expected to register strong growth in steel consumption, though potentially at a slower pace than before, driven by the development of the steel-consuming industries: the construction industry is forecast to grow at 4.7% p.a. over the 2015-2020 period (vs. 6.7% over 2005-2014), the automotive industry at 4.4% (vs. 7.9%) and machinery/equipment at 4.9% (vs. 8.5%). In order to satisfy this need for steel, the region has so far relied heavily on imports – production volume makes up only half of the apparent consumption in the region.

Figure 40: Industry outputs in SEA [2005-2020f, USD bn¹]

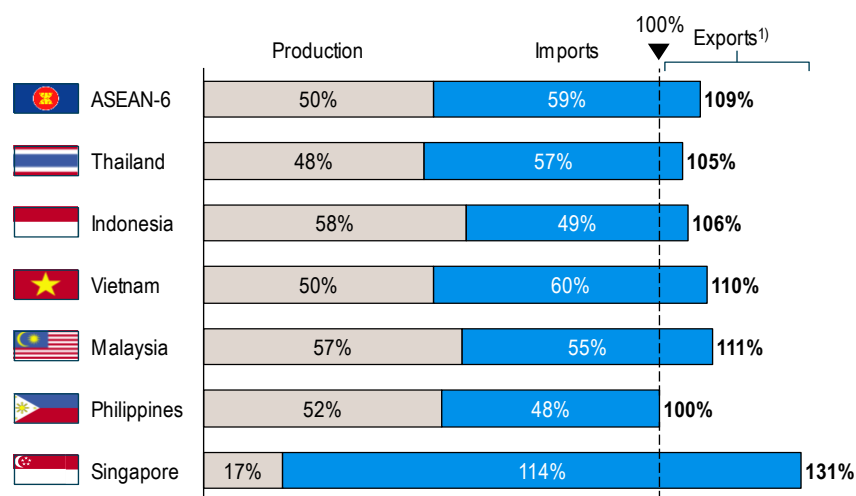


1) At 2005 constant prices

Source: IHS Global Insights; Desk Research, Roland Berger

Figure 41: Steel production, % of apparent consumption, 2014

STUDY / Southeast Asia's Economic Outlook – The Big Picture



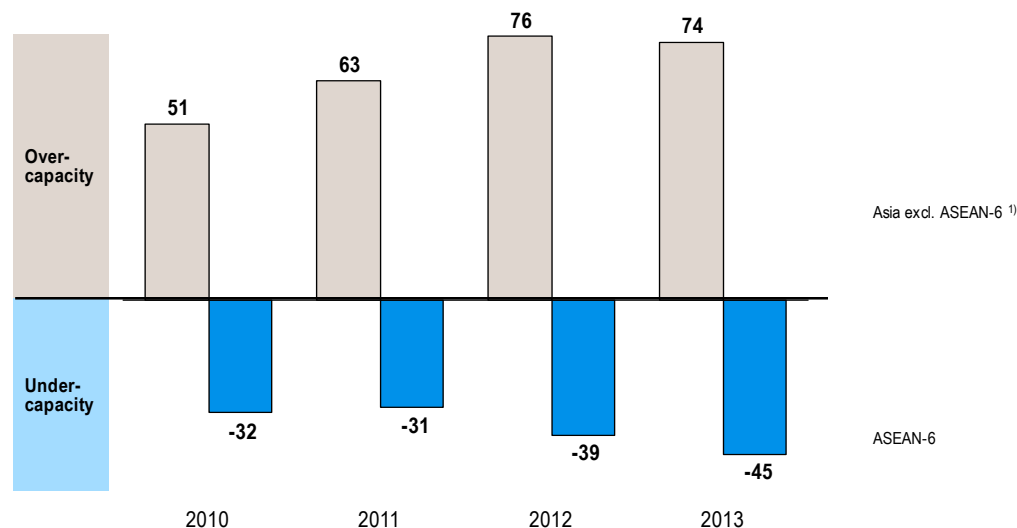
1) Exports can include domestically produced steel products, and re-exported or transshipped imports of steel products

Source: South East Asia Iron and Steel Institute (SEAISI); Roland Berger

This fact has an even stronger relevance in Singapore, where only 1/5 of the apparent consumption is supplied internally, with the rest coming from imports. In addition, exports substantially exceed domestic production and imports combined, indicating significant re-exports and transshipments.

This strong dependency on imports can be attributed to the region's persistent gap between consumption and production capacity.

Figure 42: Net exports, m tons








1) Includes China, India, Japan, Korea, Taipei

Source: World Steel Association, Roland Berger

Asia exhibits significant variations – while China, India, Japan, Korea and Taiwan have continuous overcapacity in steel production, the opposite is true for Southeast Asian countries, making the region a high net importer. Cheaper imports have forced most countries in the region to take protectionist measures to support domestic producers.

Figure 43: Recent steel trade measures regionally

Country	Trade measures	Country	Trade measures
	<ul style="list-style-type: none"> > Anti-dumping duties of 7% to 55.6% on imports of cold-rolled coil/sheet products from China, Japan, Korea, Taiwan and Vietnam, effective for 3 years > Safeguard measures against imports of seamless pipe casing and tubing, for a period of 4 years > Safeguard measure imposed on the imports of alloy-added I and H beams for a period of 3 years 		<ul style="list-style-type: none"> > Anti-dumping duties on imports of pre-painted galvanized and Zn-Al coated steel, as well as unpainted Zn-Al coated steel from China, Korea and Taiwan, effective for 5 years > Anti-dumping duties of 13.58% to 58.85% on hot-rolled coil and sheet from Korea > Tariff increase of 34.01% of the CIF price proposed on non-alloy hot-rolled coil, sheet and plate imports of thickness 0.9-50 mm and 600-3,048 mm wide classified under HS code 7208 > Preliminary anti-dumping duties of 16.14% to 33.98% on imports of alloy-added high carbon wire rod from China, effective for 4 months > Definitive measures on imports of alloy hot-rolled coil, sheet and plate until February 2016.
	<ul style="list-style-type: none"> > Anti-dumping duties of up to 25.2% on wire rod with carbon content below 0.6% from China, Indonesia, Korea and Taiwan, effective for 5 years > Dumping investigation on stranded wire originating or exported from China > Anti-dumping duties of between 3.15% and 29.37% imposed on hot-rolled coils imported from China, Indonesia and South Korea, effective for 5 years 		<ul style="list-style-type: none"> > Tariffs imposed ranging from 10.71% to 37.29% on stainless steel from mainland China, Taiwan, Indonesia and Malaysia
	<ul style="list-style-type: none"> > Safeguard investigation into imports of galvanized and pre-painted sheet/coil > Safeguard measure on angle bar imports for 4 years 		

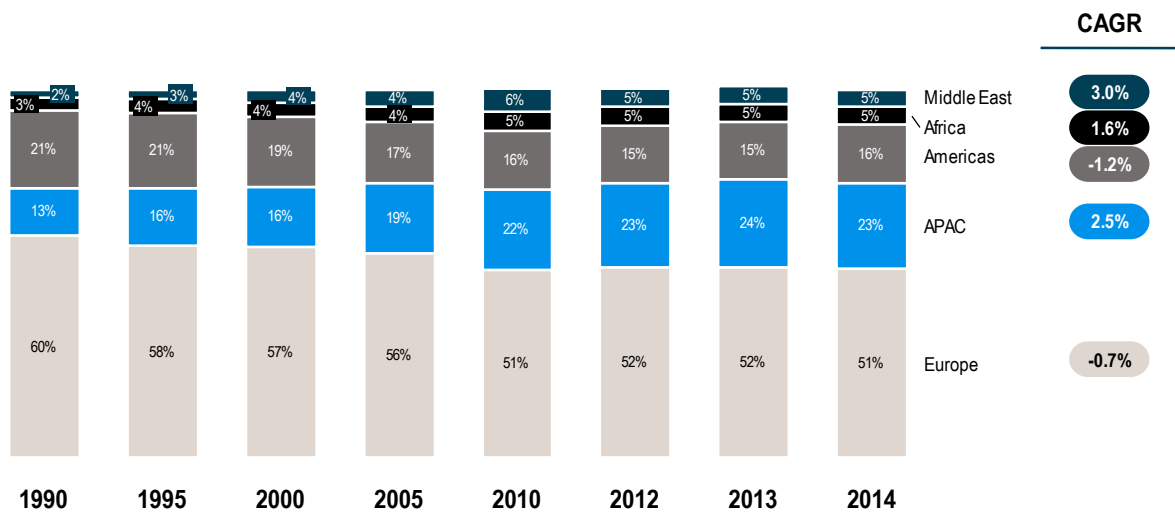
Source: South East Asia Iron and Steel Institute (SEAISI); Roland Berger

In summary, the region will register strong demand growth in steel; however, a lack of production facilities and regulatory barriers may prevent the region from capturing the full potential of the industry.

H. Tourism: are we too optimistic?

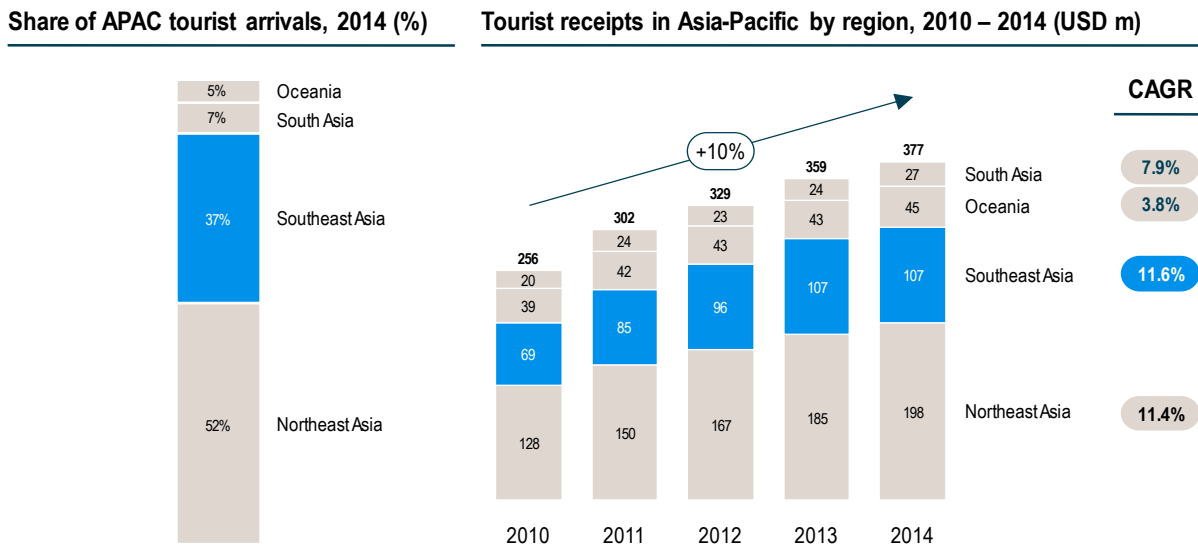
The landscape of global tourism has evolved over the last 25 years, with Asia-Pacific attracting tourists at a much faster rate than any other region (CAGR of 2.5% vs. -1.2% in the Americas and -0.7% in Europe). Within APAC, Southeast Asia was the second most attractive region in 2014, drawing 38% of tourists. It has also recorded the fastest growth in total tourist receipts over the past 5 years at 11.6% p.a.

Figure 44: Share of global tourist arrivals by region, 1990-2014 (%)



Source: UNWTO, Roland Berger

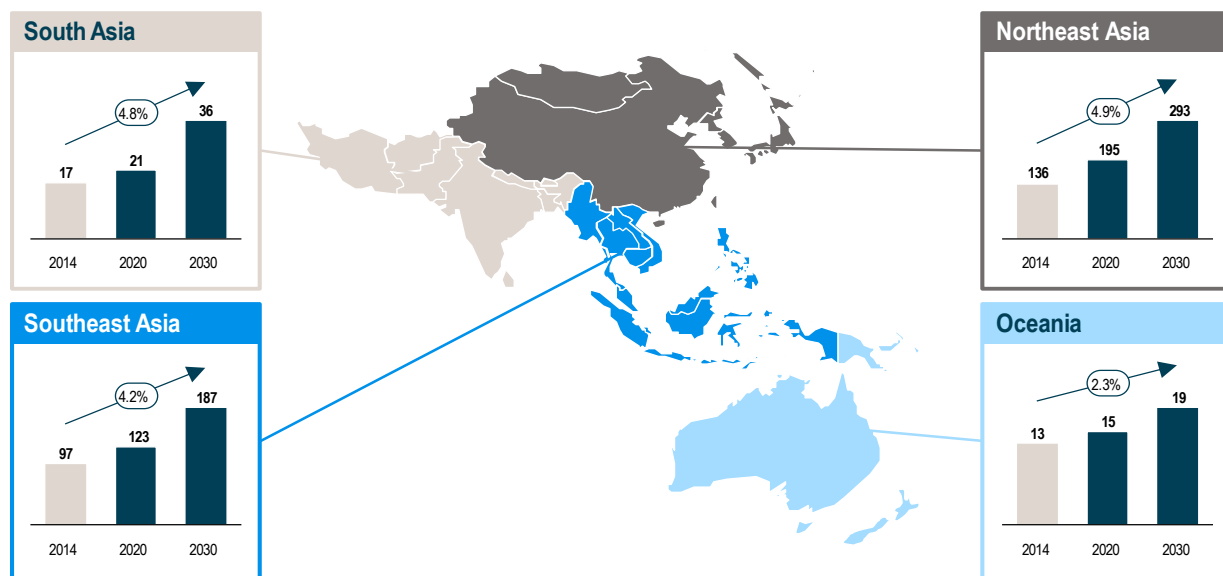
Figure 45: APAC tourist arrivals and receipts



Source: UNWTO, Roland Berger

However, over the next 15 years, Southeast Asia is expected to face tough competition from faster growing neighbors as they ramp up their infrastructure, marketing and product development.

Figure 46: APAC tourist arrivals forecast by region, m visitors



Source: UNWTO, Roland Berger

Southeast Asia is expected to face challenges of its own as it prepares to face the competition.

- > Deteriorating environment: several countries continue to neglect the upkeep of their environment despite repeated commitments.
- > Uncertain safety and security: there is a perceived unreliability of police services, in addition to threats of riots and terrorist attacks.
- > Poor health and hygiene: a high prevalence of communicable diseases and underdeveloped healthcare infrastructure in some Southeast Asia countries further impedes tourist inflow.
- > Inadequate human capital: with the notable exception of Singapore, quality of education and training is generally poor.

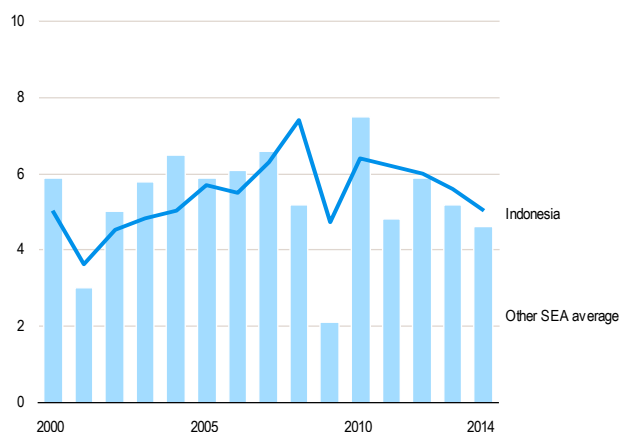
Despite these challenges, there remain significant opportunities for Southeast Asia to exploit proactively in the future, some of which include:

1. Inclusive visa requirements: impose less restrictive visa requirements than most other regions
2. Supportive government: governments to give higher priority to tourism promotion and spend on tourism-related services
3. Improving connectivity: focus efforts across the region to address shortcomings in basic and "soft" infrastructure
4. Competitive prices: keep the cost of travel and tourism in the region competitive
5. Rich cultural heritage: develop a wide range of diverse cultural offerings that provide interesting experiences for travelers

I. Indonesia: an awakening tiger?

Figure 47: Indonesian economy

Annual real GDP growth, 2000 – 2014 (%)



1) Data as of 2011

Key indicators of natural resources¹⁾

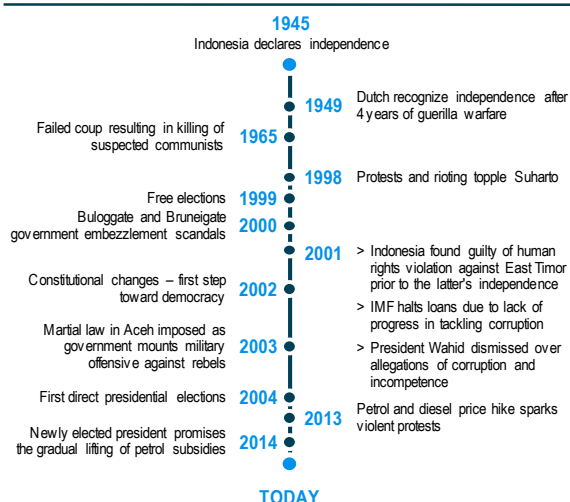


Source: IMF, Indonesia Investment Coordinating Board, Roland Berger

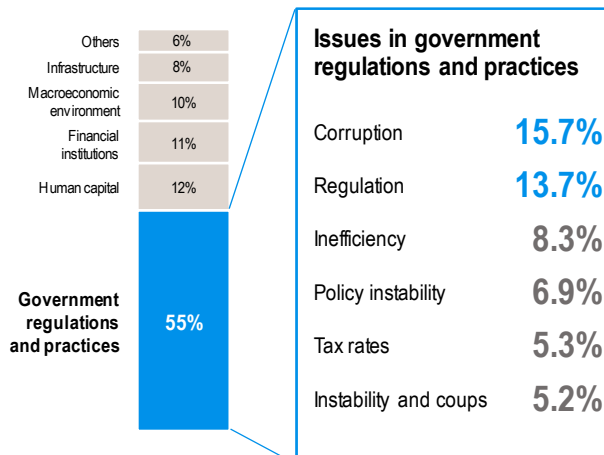
Indonesia has the potential to become an economic giant with easy access to vast natural resources. The country has a large quantity of natural gas resources and petrochemicals, is the world's second largest exporter of coal and has the world's largest geothermal reserve. It is also the world's largest palm oil exporter and second largest cocoa producer, and is rich in minerals – being the largest tin producer and fourth largest nickel and bauxite producer globally.

Figure 48: Public sector challenges

Political timeline



Most problematic factors for business



Source: BBC, World Competitiveness Report 2014 – 2015, Roland Berger

However, political instability and institutional challenges have posed a setback to its economic development, restricting growth. Since declaring independence in 1945, Indonesia has been through

several periods of political turbulence. In 1999, Indonesia finally implemented free elections, but in 2001 the IMF froze loans due to lack of progress in tackling corruption. In 2004, the country had its first direct presidential elections. The economic instability that followed led to petrol and diesel price hikes, which in 2013 led to violent protests in the country. Undeterred, the newly elected president is treading the path of gradually lifting petrol subsidies.

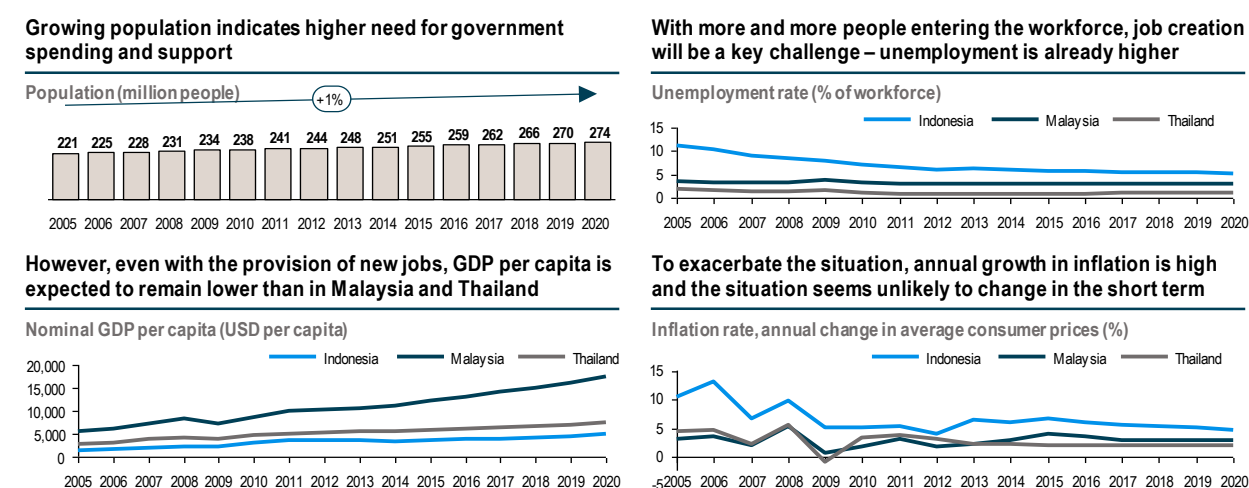
One of the key challenges for the new president will also be to improve the business environment in the country, currently reeling from corruption, excessive regulations and inefficiency issues.

To its credit, the new government has announced new policies and targets, though the actual impact on the economy remains to be seen. Since 2010, the highest GDP growth Indonesia has achieved has been 6.5%, making the stated 7% GDP growth target ambitious. The ban on exports of unprocessed minerals and the reduction in fuel subsidies may augur well for the government deficit, but their economic and political impact is as yet unknown. The government's plans to improve the marine infrastructure are a welcome move to boost trade and connectivity, but they need to include the boosting of operational efficiencies as well, without which the expansion may create more problems than it solves. Other initiatives on education, healthcare and corruption look good on paper, but how much of them will be realized in the short to medium term remain a big question mark. On the whole, the government wants to boost economic performance and support local companies, but by implementing protectionist policies, there is a real danger of alienating much-needed foreign investment in the country that aspires to be Asia's next powerhouse.

By 2020, Indonesia's population is expected to reach 274 million. With more and more people entering the workforce, job creation will be a key challenge, the unemployment rate already being higher than it is in Malaysia and Thailand. Even with the provision of new jobs, GDP per capita is expected to remain low and grow slower, with higher inflation exacerbating the situation.

It is clear that structural reforms are the order of the day for Indonesia if it is to truly fulfill the huge potential on offer as it navigates its way under a new political regime.

Figure 49: Indonesian macroeconomic forecasts

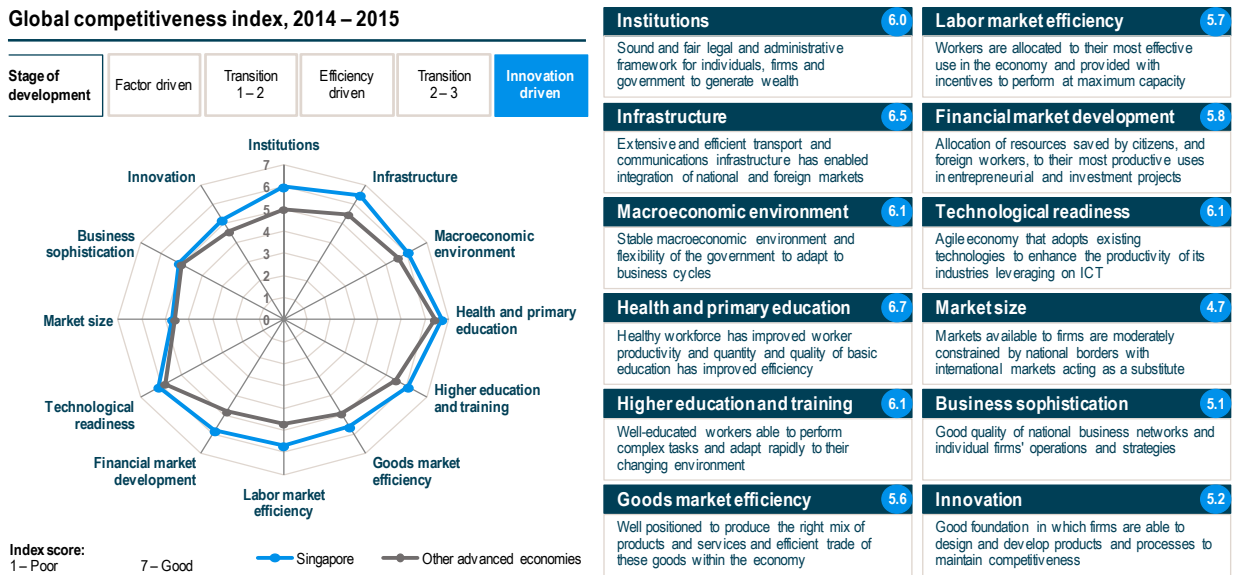


Source: IMF, Roland Berger

J. Singapore: at a crossroads

Singapore has consistently ranked high on many indices. Its Global Competitiveness Index – which measures a number of critical factors for innovation, such as education and technological readiness – has been consistently high.

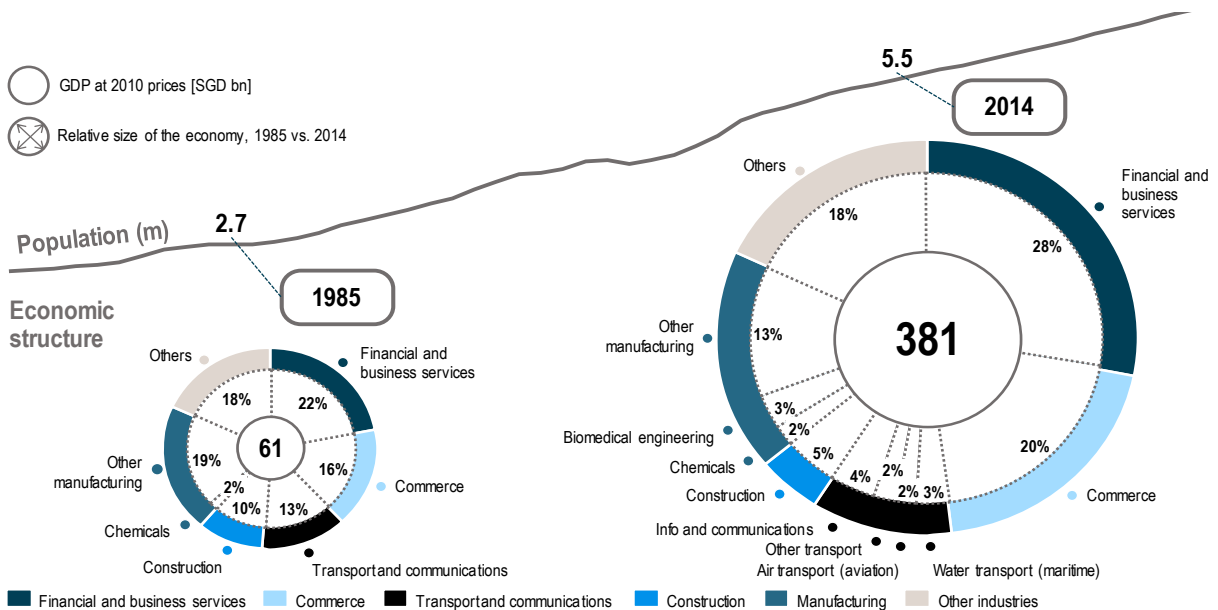
Figure 50: Singapore's competitiveness summary



Source: World Competitiveness Report 2014-2015, Roland Berger

Ranked second in the world for several consecutive years, it boasts well-educated workers who are able to perform complex tasks and adapt rapidly to their changing environment.

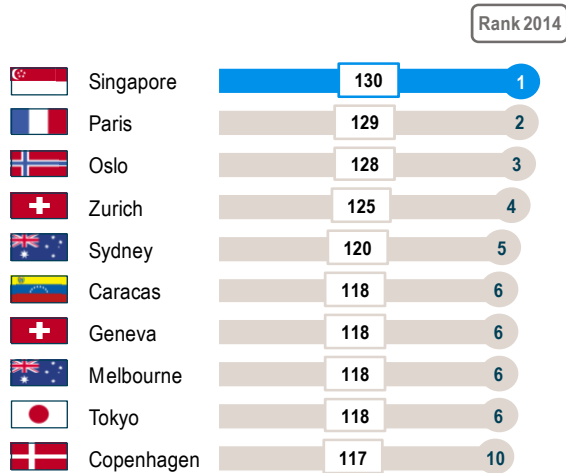
Figure 51: Singapore economic snapshot: 1985 and 2014



Source: MTI Singapore, Department of Statistics Singapore, Roland Berger

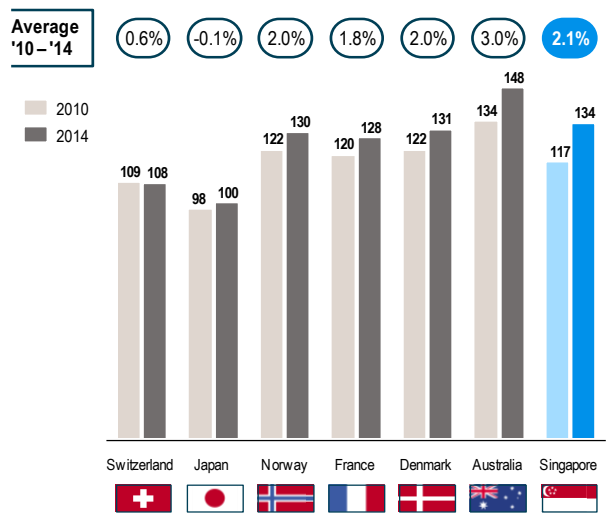
Figure 52: Singapore's cost of living overview

Top 10 most expensive cities in the world¹⁾



1) Indices with base of New York City = 100

Consumer price index (2000 = 100)



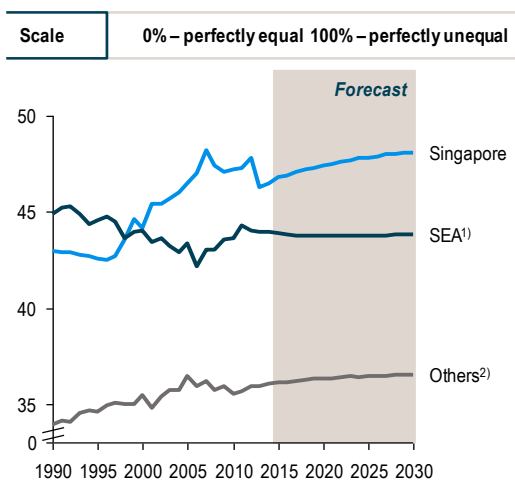
Source: Economist Intelligence Unit, Euromonitor, Roland Berger

However, one of the biggest concerns for policymakers – and for residents of this city state – is the cost of living in Singapore. Two years in a row, 2014 and 2015, the Economist Intelligence Unit (EIU) ranked Singapore the most expensive city globally, a far cry from its 2005 ranking of 19th most expensive city in the world.

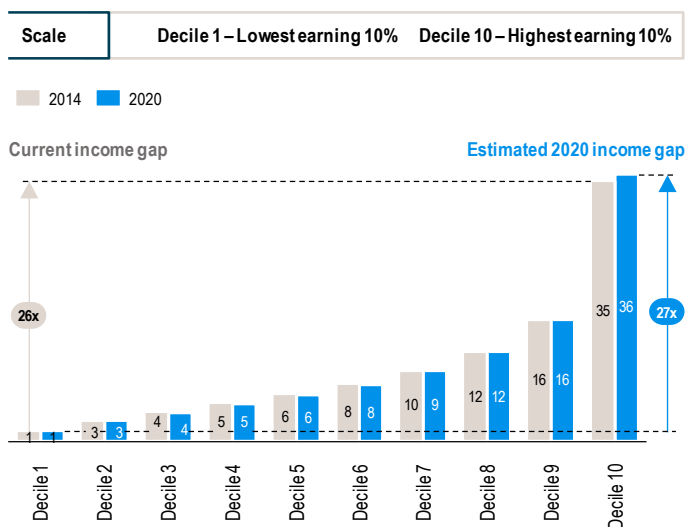
Sudden rapid immigration, according to the EIU, caused a surge in demand for housing and a rise in the cost of living. Housing prices have gone up 9% p.a. since 2009, driven significantly by demand from a large population of wealthy expatriates.

Figure 53: Income distribution outlook

GINI coefficient



Income distribution of population (% of annual disposable income)



Source: Euromonitor, Roland Berger

But beyond the increased cost of living, it is the Gini coefficient – an index that measures income inequality – that is the real worry for Singapore. Its Gini coefficient was 0.463 in 2014 and could go as high as 0.474 by 2020 – levels that are much higher than most of the other expensive cities in the world. Singapore is set

to see the world's fastest growth in "the number of super rich individuals" in the coming decade, according to Frank Knight, a real estate consultancy. By 2024, the island nation will have almost 5,000 UHNWIs with assets of USD 30 million or more, up from 3,227 in 2014. In fact by 2020, the top 10% of the population is expected to make 28 times the income of the bottom decile.

Economists from the IMF outlined that for economies with Gini coefficients below 0.45, growth can still be robust, but once it surpasses 0.45 – which Singapore has consistently scored above throughout the last decade – growth slumps. Better income equality would also ensure a sturdier middle class, boost consumer spending and create more jobs, enhancing the multiplier effect within the economy.

The other repercussion of income inequality is social unrest, also driven by an ever increasing proportion of foreigners in the country. The number of foreigners living in Singapore rose by 112% to 1.6 million between 2004 and 2014, while the resident population rose by only 13%, to 3.9 million, over the same period. Social tensions, as seen in recent riots in a small Indian-dominated area, will remain a cause for concern for the government as it plans to further increase populations through immigration.

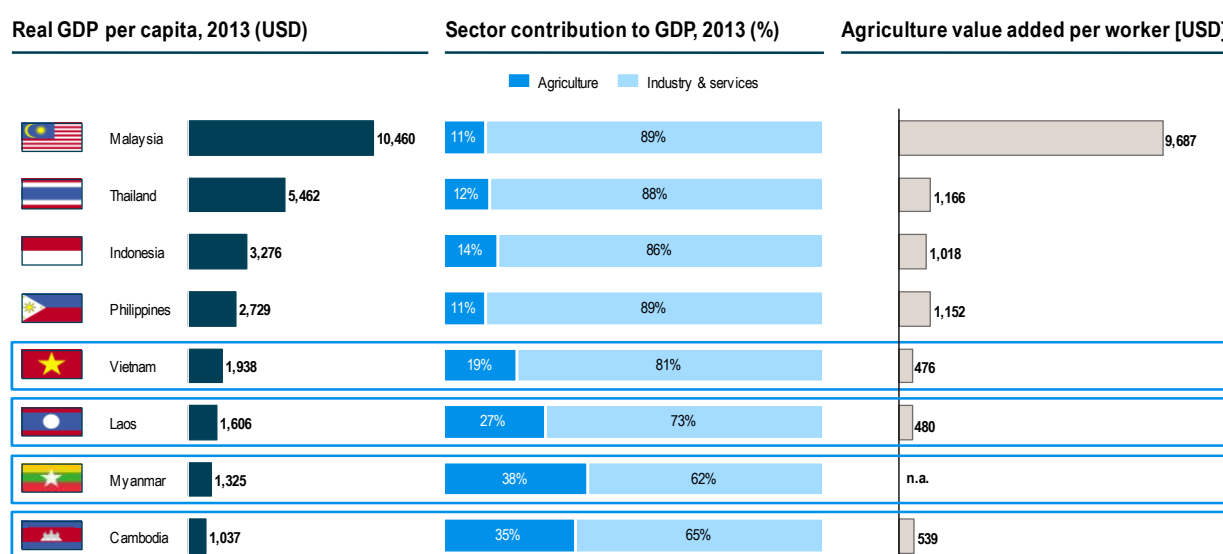
Additionally, Singapore needs to keep its economy as diversified as possible. Already, the country is economically trade-dependent, which is often cited as a bellwether for economies in the region. It has, in the past, claimed to be the center of the region, given the number of multinationals headquartered on the island. But it must identify ways of keeping alive its traditional industries that contribute to continued economic growth, while making sure Singapore remains a desirable place to live.

Given the cost-of-living pressures, widening income disparities, increasing population and declining economic diversity, the government has to continue improving social policies, while pursuing economic growth. To this end, policies must continue strengthening segments of society facing constraints that are due to these circumstances; after all, a bigger middle class will enable Singapore to achieve its economic goals.

K. CLMV: the backbone of Southeast Asia's future?

The CLMV states (Cambodia, Laos, Myanmar, Vietnam) are considered the poorest nations in Southeast Asia, with GDP per capita in the range of USD 1,000 – 2,000. This is attributable partly to a substantially higher share of agriculture in GDP, but also to much lower agricultural productivity, which makes the situation worse.

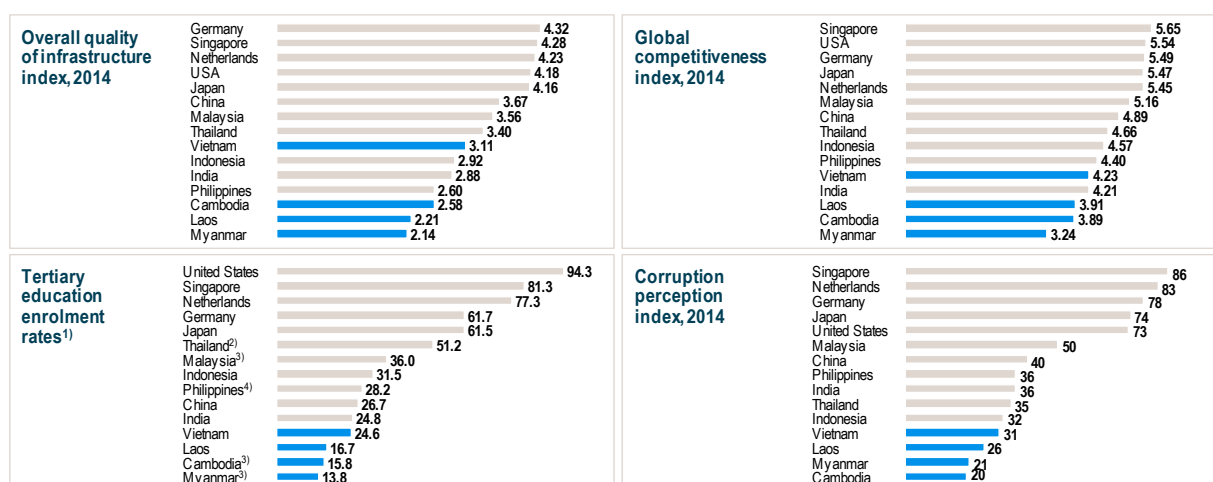
Figure 54: Agriculture's contribution to the economy



Source: CIA Factbook, Roland Berger

In addition, institutional challenges have resulted in low performance on indicators related to governance and efficiency of public services, further hindering socio-economic growth. This can be seen through the lenses of infrastructure, competitiveness, education and corruption indices.

Figure 55: Selected performance indices



1) 2012 unless otherwise specified; 2) 2013; 3) 2011; 4) 2009

Source: World Economic Forum, Roland Berger

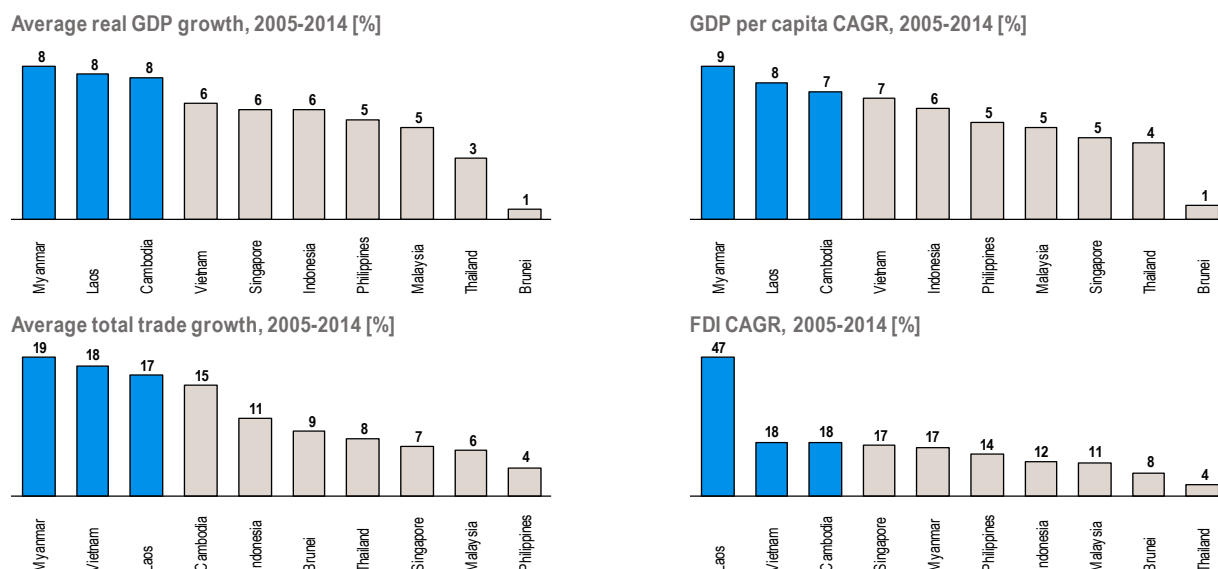
- > From an infrastructure perspective, financial constraints and rough terrain have hindered development; however, governments are proactively planning and engaging private institutions in an effort to improve connectivity.
- > On competitiveness, CLMV have performed poorly so far, across institutional, social and financial criteria. But recent openness to the idea of venturing into the global market has prompted improvements in internal markets and infrastructure.
- > Enrollment in education has been poor as the population has primarily focused on agricultural activity, dragging young people into the sector. Education reforms are expected to improve the situation, though the timeline and scale are still quite uncertain.
- > Corruption is not just a CLMV issue, with other countries in the region not faring much better either. But as the nations gradually open up to global investments, transparency and bureaucracy are expected to improve.

The CLMV states have undergone significant reforms over the last few years in a bid to tackle the above-mentioned challenges.

- > Cambodia is liberalizing its economy gradually and reconciling with its political past. It has led energy development on the Mekong river having approved the building of dams along it, and has also seen significant growth in garment exports and the agriculture, tourism and construction sectors.
- > Laos is decentralizing its economy, a process it began in 2011 through the National Socio-Economic Development Plan. It joined the WTO in 2013 and has been proactive in its efforts to guarantee the equal inclusion of women in the workforce. It has seen increasing trade with neighboring countries and has enjoyed improvements in infrastructure and tourism development and the promotion of natural resource-based industries.
- > Myanmar has been buoyed by the entry of the National League for Democracy into parliament for the first time, indicating a reconciliation process between a newly elected president and the opposition represented by Aung San Suu Kyi. The country has begun to open up to foreign investment as evident by the recent telecom and banking license auctions that were carried out in a transparent and efficient manner. A large domestic market, accelerating economic reforms and an advantageous geographic location close to China and India augur well for this fast growing nation.
- > Vietnam has seen significant reforms in areas like agriculture, oil and services, particularly after having joined the WTO in 2007. After political liberalization within the ranks of the leading Communist party, the country has proactively engaged in international economic integration, normalizing relations with the EU, U.S. and China. It is also now seeing increasing investments from multinationals hailing from around the globe.

All of these reforms seem to have successfully positioned CLMV at the forefront of the region's growth, as evidenced by encouraging macroeconomic indicators.

Figure 56: Selected macroeconomic indicators



Source: IMF, World Bank, ASEAN Stats Database, Roland Berger

Sustaining this growth will depend on how these nations address the important challenges facing their leaders in the future.

Figure 57: Key challenges facing CLMV

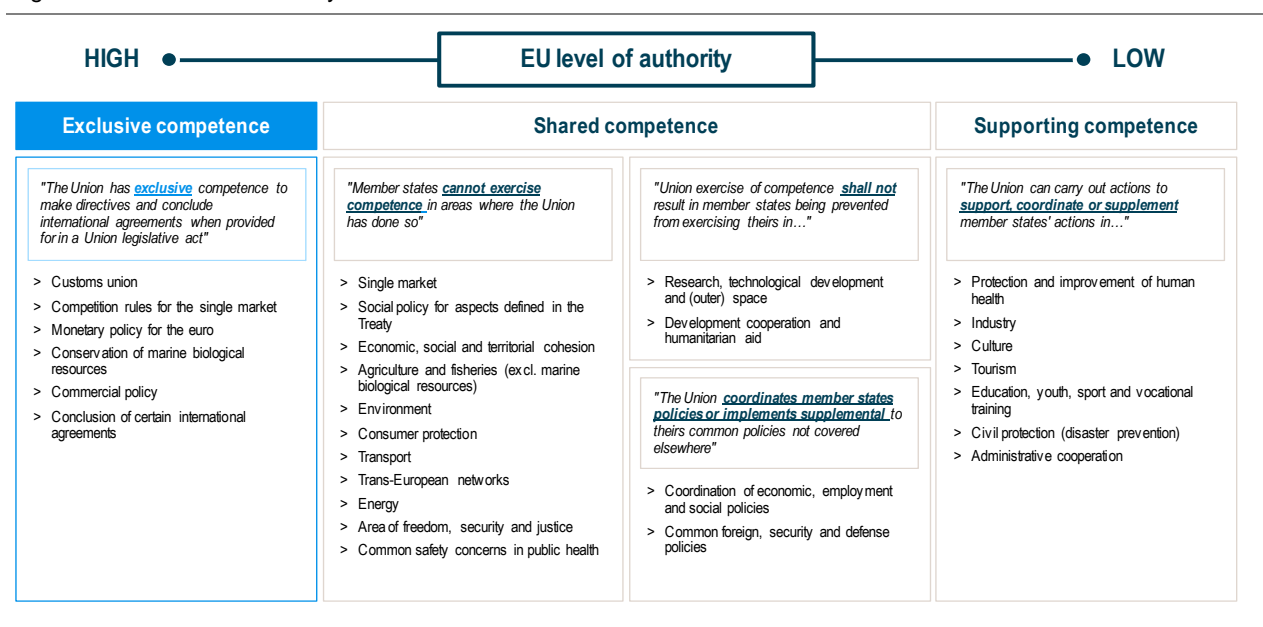
<p> Cambodia</p> <ul style="list-style-type: none"> > Strong discrepancy in life standard between urban and rural environments, combined with strong poverty: 50% of the population lives on <2 USD/ day > SMEs, the country's main wealth and employment source, face issues in development, due to endemic red tape, corruption, unclear laws, etc. > Women and certain minorities still face discriminatory laws, combined with blocking socio-economic norms 	<p>Laos </p> <ul style="list-style-type: none"> > Important environmental and social cost accompanying the economic development, particularly for land and compensation disputes, leading to social unrest > Decreased human rights policy, by shutting down/ restraining the activity of NGOs and other potential political opponents, starting with 2012 > Unclear legislation for opening SOEs to foreign firms, currently in an uncertain "Foreign JVs" state
<ul style="list-style-type: none"> > Inadequate resource allocation between the public and the private sector, leading to strong development inefficiencies: state sector creates 10% of employment and consumes 70% of total investment > Widespread corruption and crony capitalism among the leaders of the country, leading to many SOEs being debt-stricken or bankrupted by funds leakages since 2012 	<ul style="list-style-type: none"> > Need for redefinition of the military's political and economical role, given that 25% of the Parliament is still allocated by law to the armed forces > Strong inequality among the different ethnicities, leading to widespread social and humanitarian unrest > Important issues arising from the overruling of land and property rights for economic development projects, often stained by widespread corruption among the decision-makers
<p> Vietnam</p>	<p>Myanmar </p>

Source: Asia Foundation, Asian Development Bank, Roland Berger

L. Regional integration: is the EU a relevant model?

The European Union (EU) was established in 1993 through the Treaty of Maastricht, while ASEAN came into existence in 1967, almost a quarter of a century earlier. Both of them have a long history of internal international collaboration built on the foundation of nations with a similar culture and history. The EU enjoys a much wider composition of nations than ASEAN (28 vs. 10), but has shown weaker economic performance as compared to ASEAN member economies. Between 2008 and 2014, the EU's average annual real GDP growth was only 1.5%, while ASEAN member economies enjoyed 6.6% growth over the same period. FDIs dropped by nearly 15% in the EU but grew by 12% in Southeast Asia, and while unemployment in the EU has risen by 6.5% since 2008, it has declined in the Southeast Asian region by 4.5%.

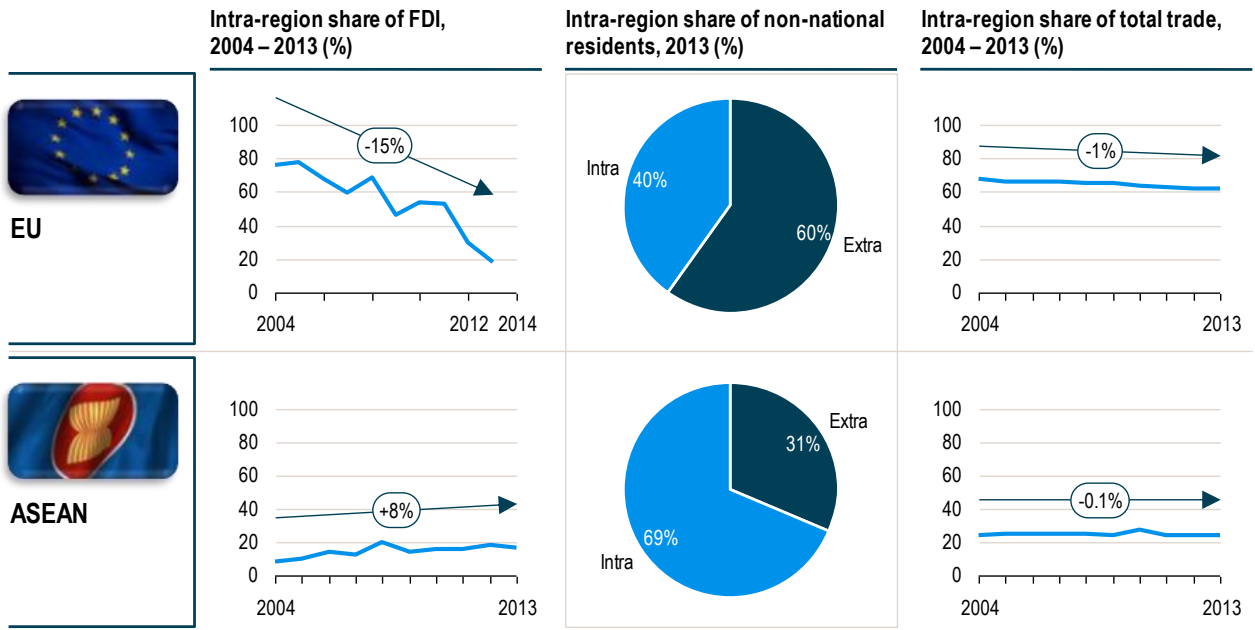
Figure 58: EU level of authority



Source: Desk Research, Roland Berger

The EU has always faced the challenge of aligning countries with different economic backgrounds – 11 of which had a communist economic system 20 years previously. To this end, it has created a system of intervention in the policies of each of the union countries by separating competences that remain with the nations from those which were transferred to the EU level.

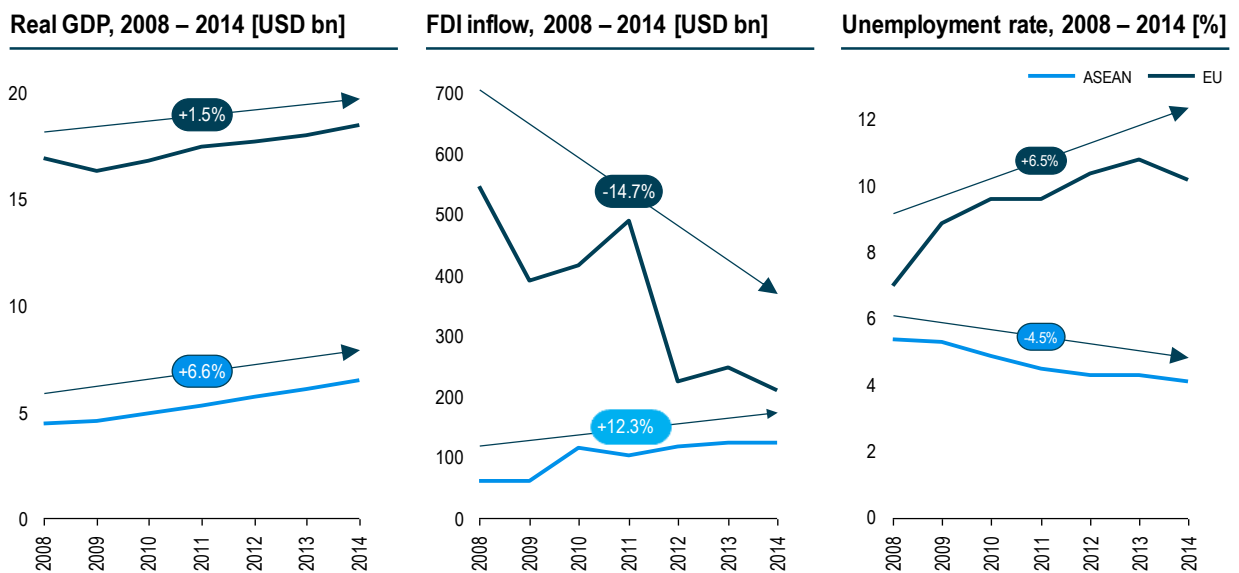
Figure 59: Intra-regional performance, EU vs. ASEAN member economies



Source: Eurostats, ASEAN Stats Database, Roland Berger

Despite better control and wide coverage of regional policies, the EU has been less successful at cross-border integration. The intra-region share of FDIs has plummeted from nearly 80% in 2004 to 20% today, while ASEAN's grew by nearly 8% annually over a similar period. The share of non-national residents from within the region is also much higher in ASEAN member economies than in the EU (69% vs. 40%), and the intra-region share of total trade has declined in the EU while remaining stable in Southeast Asia.

Figure 60: Performance on selected indicators – EU vs. ASEAN member economies

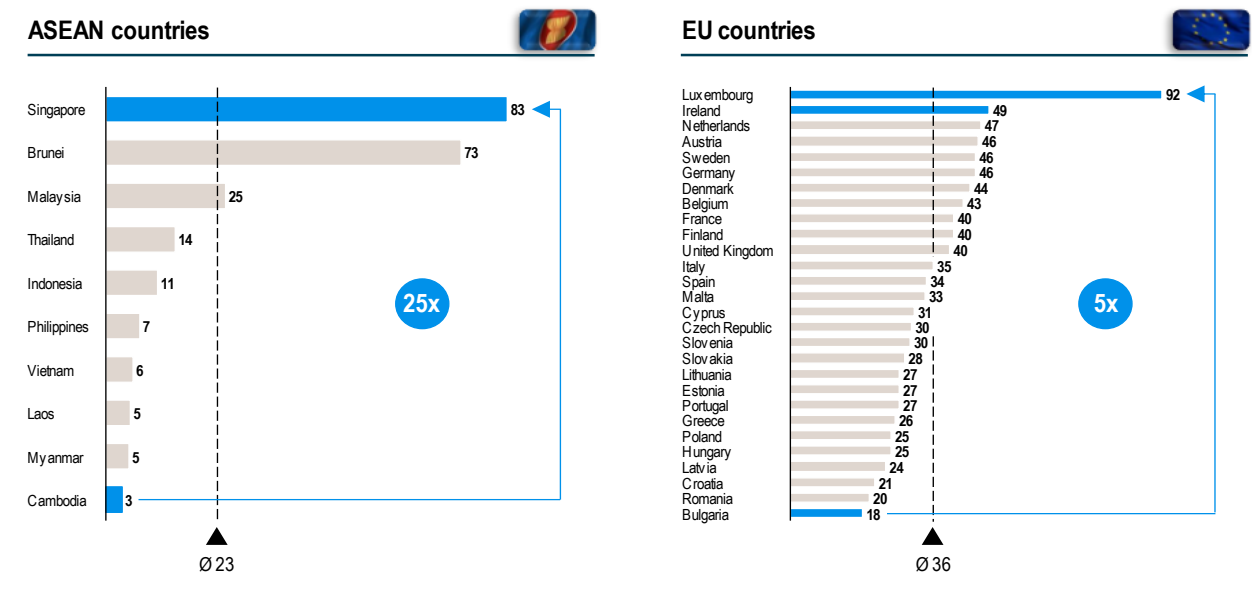


Source: Euromonitor, Roland Berger

Despite stronger economic performance, marked income disparities between ASEAN member economies could pose serious socio-economic threats to the region's success in the future. Among the 28 EU countries, the highest earner is only 5 times higher than the lowest as measured in real GDP per capita, while the same figure is an astonishing 25 times higher in ASEAN member economies, attributable to

Singapore and Brunei as the outliers. 70% of the ASEAN member economies fall below the average regional GDP per capita and the income variance is much higher than in the EU.

Figure 61: Real GDP per capita, 2014



Source: Euromonitor, Roland Berger

As two entities with similar goals in mind, ASEAN member economies and the EU have lessons that can be learned from each other.

ASEAN member economies should strive to:

1. Find ways to develop and exploit internal capabilities that could be strategically leveraged upon in the long term to avoid economic contraction as markets begin to mature.
2. Improve influence to exert better control over integration initiatives within its purview to override potentially damaging internal agendas of each nation.
3. Evaluate and reduce marked income disparities between member countries to ensure that policies and initiatives adopted can easily be applied across borders.

The EU, on the other hand, should focus on:

1. Rejuvenating the attractiveness of the business environment within the region through reduction of regulations and restrictions for foreign and co-member nations.
2. Developing a sense of inclusivity and "openness" in cross-border migration to promote regional unity and perhaps reduce unemployment rates.
3. Boosting confidence among member countries in the alliance's economy and business environment to improve intra-EU flow of goods, services and human capital.

Publisher

Roland Berger GmbH

Sederanger 1

80538 Munich

Germany

+49 89 9230-0

www.rolandberger.com

Photo credits

Cover: Fotolia

Disclaimer

This study has been prepared for general guidance only. The reader should not act on any information provided in this study without receiving specific professional advice.

Roland Berger GmbH shall not be liable for any damages resulting from the use of information contained in the study.



iTunes Store
[www.rbsc.eu/THINK ACT app](http://www.rbsc.eu/THINK_ACT_app)



Google Play
www.rbsc.eu/RBAndroid

© 2015 Roland Berger Strategy
Consultants GmbH. All rights reserved.

