





NAVIGATING HIGH WINDS

Southeast

Asia OUTLOOK 2024—34

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Key Messages

- Southeast Asia will likely outgrow China over the next decade, despite global headwinds
- The world has changed in fundamental ways; governments need to adjust
 - China manufacturing and innovation is now ultra-competitive and has driven premature de-industrialization of many developing countries
 - Low-cost labor, subsidized land, and tax holidays are no longer the main drivers of **FDI**
 - Climate change raises investment needs and changes priorities
 - Deep technology innovation is concentrating in the US and China; their rivalry is accelerating the pace of change
 - The G7 is becoming more protectionist

- Five "traditional" priorities stand out to raise Southeast Asia growth
 - Raise workforce skill levels/education. (including foreign talent)
 - Increase physical and digital infrastructure spending
 - Attract more domestic and foreign investment
 - Raise competition in domestic markets
 - Strengthen government institutions

- Strategies to raise growth will require policy intervention
 - Investing in future growth sectors
 - Fostering tech-enabled disruptors (TEDs)
 - Expanding capital markets' breadth and depth
 - Accelerating green transition
 - Committing to growth-friendly multilateral initiatives

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Opportunities to integrate are less important than domestic levers







2024–2034 Southeast Asia GDP Forecast

Opportunities to Accelerate Growth

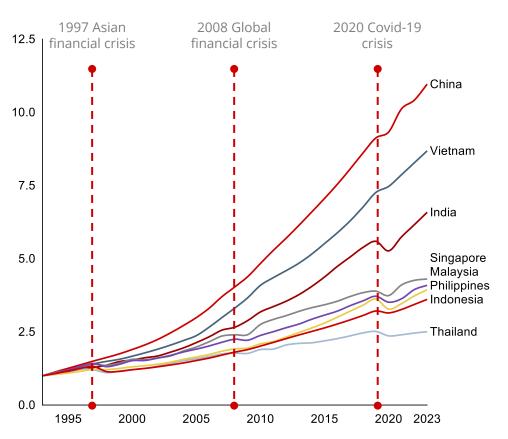
Deep Dive: Explaining 1993–2023 Economic Outcomes

Deep Dive: Additional Data for 1993–2003

Deep Dive: External Trends

GDP | Southeast Asia has enjoyed stable economic growth over the last 30 years, with Vietnam leading the region

Real GDP indexed to 1993 (1993–2023)



	2023 Real GDP (USD B)	'22–'23 change (USD B)	'93–'03 CAGR	'03–'13 CAGR	'13–'23 CAGR	'93–'23 Multiple
Vietnam	420	~20	7.4%	9.0%	6.0%	8.7x
Singapore	501	~5	5.3%	6.7%	3.0%	4.3x
Malaysia	400	~14	5.4%	5.0%	4.0%	4.1x
Philippines	437	~23	3.9%	5.4%	4.7%	3.9x
Indonesia	1,371	~65	3.2%	5.7%	4.2%	3.6x
Thailand	515	~9	3.6%	4.0%	1.8%	2.5x
SEA-6	3,643	~138	4.1%	5.7%	3.9%	3.8x
China	17,795	~888	9.5%	9.5%	6.0%	11.0x
India	3,574	~231	6.1%	7.6%	5.7%	6.6x

Notes: Real GDP calculated based on constant 2023 USD exchange rates, indexed to 1993. China GDP excludes Hong Kong and Macau. Sources: CEIC; IMF

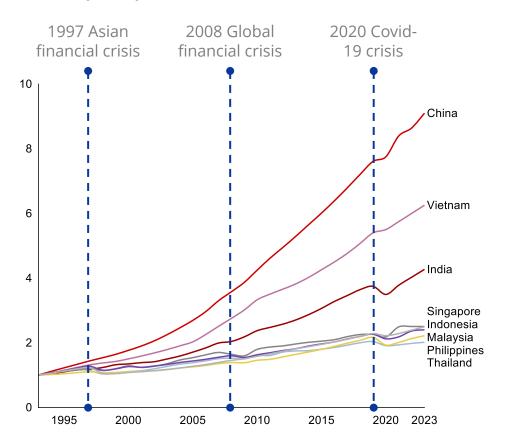






GDP per capita | Adjusting for population growth, Southeast Asian countries all more than doubled income, with Vietnam a breakout leader

Real GDP per capita indexed to 1993 (1993–2023)



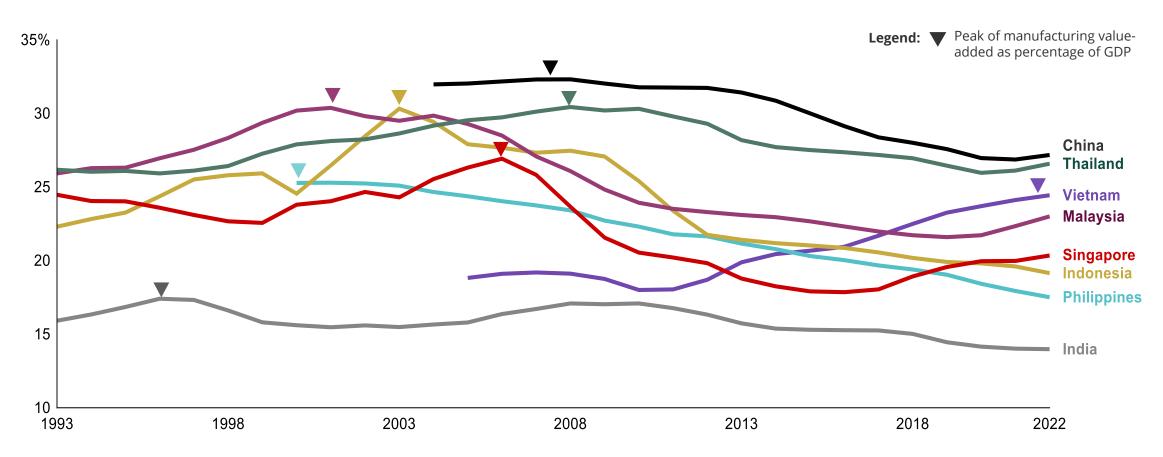
	1993-03 CAGR	2003-13 CAGR	2013-23 CAGR	1993–2023 Multiple
Vietnam	6.0%	7.9%	5.0%	6.3x
Singapore	3.1%	3.8%	2.5%	2.5x
Indonesia	1.6%	4.4%	3.2%	2.5x
Malaysia	2.9%	3.2%	2.8%	2.4x
Philippines	1.6%	3.5%	3.1%	2.2x
Thailand	2.4%	3.2%	1.4%	2.0x
SEA-6	2.5%	4.3%	2.8%	2.6x
China	8.5%	8.9%	5.6%	9.1x
India	4.1%	6.1%	4.7%	4.3x

Notes: Real GDP calculated based on constant 2023 USD exchange rates, indexed to 1993; YoY exchange rates likely impacted GDP growth figures given volatility of foreign exchange across countries; China GDP excludes Hong Kong and Macau. Sources: CEIC; IMF



Manufacturing value-added | Manufacturing share of GDP has declined in most Southeast Asian countries since the 2000s; Indonesia and the Philippines were hit particularly hard

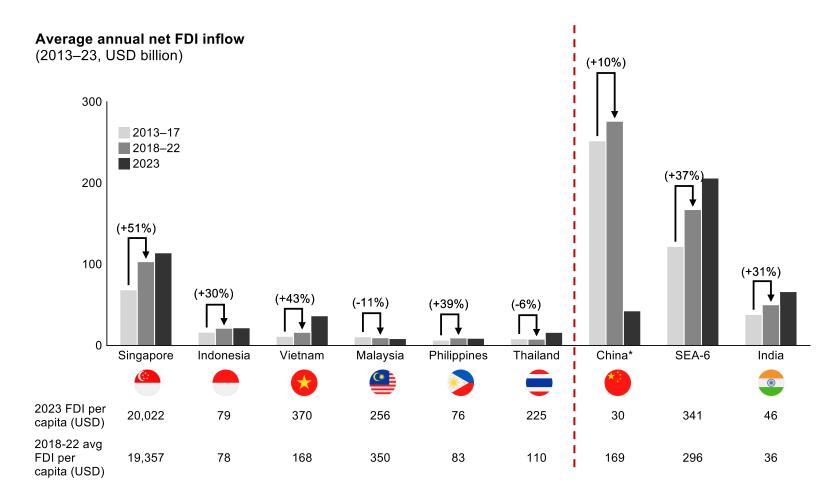
Manufacturing value-added as percentage of GDP (1993–2022, three-year rolling average)



Notes: SEA-6 includes Singapore, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam; (1) MVA refers to manufacturing value-added; MVA is the total estimate of net output of all resident manufacturing activity units obtained by adding up outputs and subtracting intermediate consumption. Sources: WTO; World Bank



FDI | FDI growth in Southeast Asia is strong, led by Singapore with over 60% of SEA-6 FDI since 2018

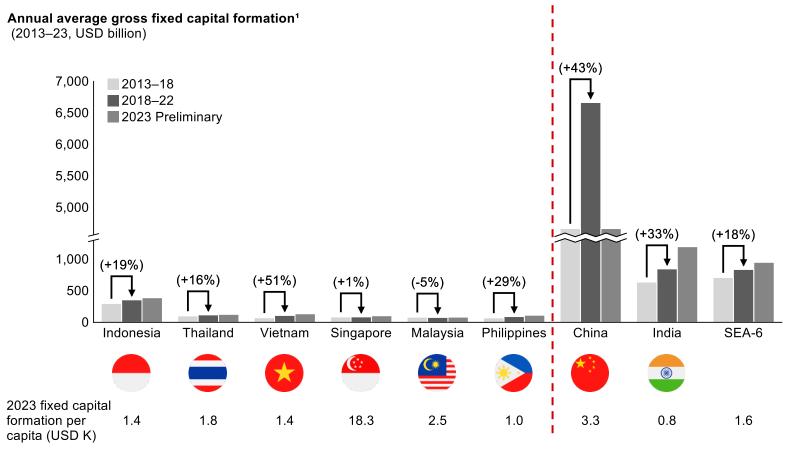


- For the first time in 10 years,
 Southeast Asia now attracts more
 FDI than China
- While FDI is growing rapidly in India, it is just keeping pace with Southeast Asia
- Within Southeast Asia, Singapore has gone from 56% (2013–17) to 62% (2018–22) of FDI
- FDI is to some degree a lagging indicator:
 - Vietnam has the highest growth, but our sense is that commitments will slow over the next two years
 - Malaysia shows the slowest growth in FDI, but announced commitments point to a significant increase in FDI over the coming years (semiconductors, electronics, data centers, and other China+1)

Note: (*) Includes Hong Kong, Macau. Sources: UNCTAD; Government sources



Domestic Capital Formation (DCF) | Strong DCF reflects confidence in local business opportunities and improving capital markets



Notes: (1) Gross fixed capital formation (GFCF) is a measure of the total amount of resources invested in either building or renewing fixed assets, such as infrastructure, machinery, and equipment, as well as changes in inventories within an economy over a specified period. It is an indicator of an economy's investment in enhancing its production capacity; 2023 Preliminary is estimated by triangulating across local department sources and historical data from World Bank, to be finalized later this year. Sources: World Bank; Trading Economics; DOSM; Lit. Search; CEIC

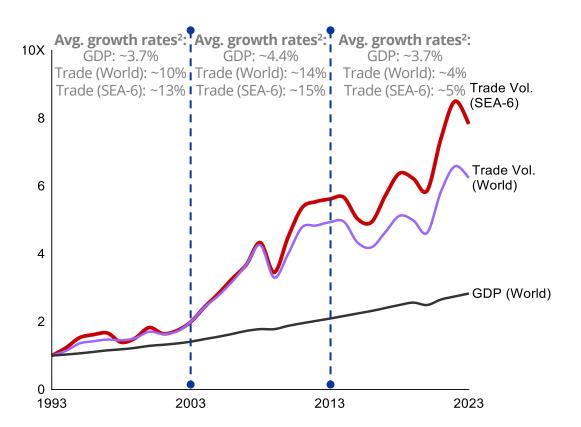
- Indonesia has the largest domestic investment volume in SEA-6, supported by policies aimed at developing downstream industries like nickel ore processing for EV batteries and energy storage systems
- Vietnam and the Philippines saw strong growth in gross fixed capital formation:
 - **Vietnam**'s growth is anchored in its robust manufacturing base
 - **The Philippines** saw an increased growth in infrastructure
- Malaysia's relatively flat GFCF growth reflects the downturn in the mining and construction sectors during Covid-19, political instability, and a softer macroeconomic outlook
- Both Singapore and Thailand experienced relatively subdued growth in GFCF post-Covid-19, with slower private investments across construction and machinery



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Trade Growth | Southeast Asia is highly dependent on trade

Real GDP and trade volume¹ indexed to 1993 (1993–2023)



TRADE AS % OF GDP	1993-2003	2003-2013	2013-2023
World	26%	42%	43%
US	10%	15%	17%
EU ³	35%	60%	68%
China	14%	35%	34%
India	11%	15%	30%
SEA-6	56%	86%	89%

Notes: (1) Real GDP indexed to constant 2023 prices (based on 2023 USD fixed exchange rate), trade volume includes both imports and exports of total merchandise goods; (2) Represents 10-year average growth rates excluding periods of crises: 1993–2003 excludes 1998 (Asian Financial Crisis) and 2001 (Dot com Bubble and 9/11), 2003–2013 excludes 2009 (trough of the Great Financial Crisis), and 2013–2023 excludes 2020 (Covid-19 pandemic); (3) EU 1993–2003 average only captures data from 2000–2003 period, when the data was published | Source: WTO; Euromonitor



Seven traditional growth drivers set the foundation for our forecast framework; On these drivers, the performance of SEA-6 countries has been mixed

Lowest in SEA Top in SEA									
GRO	OWTH DRIVERS	INDICATOR		ID	MY	PH	SG	TH	VN
1	Ease of doing business	Ease of doing business score by World Bank (2020) ¹	70	81	63	86	80	70	
2	Increase competition	Score 0–1.0	0.09	0.10	0.10	0.07	0.07	0.12	
3	Strengthen institutions	Average of World Governance Indicator scores by World Bank (2022)	Score -2.5–2.5	-0.1	0.5	-0.3	1.9	-0.1	-0.1
		Average reading, math, science PISA score (2022)	Score 0–600	369	404	353	560	394	468
	4 Improve workforce quality and availability	Human Capital Index by World Bank (2020)	Score 0–1.0	0.54	0.63	0.55	0.89	0.62	0.69
4		Female labor force participation ratio (2023)	% total pop.4	53%	52%	47%	62%	59%	69%
	avanasmey	Employment to population ratio (2023)	% total pop.4	65%	63%	59%	67%	66%	72%
_	Build	Public infrastructure investments (2013–19) ³	% of GDP	3%	8%	3%	5%	5%	5%
5	infrastructure	Infrastructure score, Logistics Performance Index by World Bank (2023)	Score 0–5	2.9	3.6	3.2	4.6	3.7	3.2
6	Increase stability	Reserves to gross external financing (2022)	Ratio	2.5	1.2	2.2	0.35	1.8	2.3
7	Facilitate	Cumulative Foreign Direct Investment as percentage of cumulative GNI (2018–22)	%	2.3%	3.6%	2.6%	35.3%	1.9%	6.7%
	investment	Cumulative Gross Fixed Capital Formation as percentage of cumulative GNI (2018–22)	%	38.5%	24.6%	25.3%	27.9%	28.4%	45.3%

Notes: (1) The World Bank conducted changes to the rank and score calculation methodology for the index after an internal audit in 2020 to ensure consistency and comparability of scores across countries and between year to year; the changes resulted in revision of previously published scores; (2) HH index computed by squaring each company's market share and summing them up respectively; (3) Singapore's low reserves to gross external financing ratio is a result of its high external liabilities from large capital inflows as an international financial center; (4) Percentage of 15+ population; (5) IMF data published in May 2021 with latest year up to 2019 | Sources: World Bank; Euromonitor; Trading Economics; OECD; UNCTAD; UNSD; WTO; IMF



The world has changed profoundly; Country growth strategies must evolve

1 China - Competitiveness

China manufacturing and innovation are ultra-competitive, causing premature de-industrialization in many developing countries

2 China - Southeast Asia

In addition to being the largest trading partner, China is likely to become the largest investor in Southeast Asia

China - US Competition

This creates opportunities, but also the risk of diplomatic pressure and compliance cost

4 Changing drivers of FDI

Low-cost labor, subsidized land and tax holidays do not drive high quality FDI

- Minimum tax agreement reduces opportunity for tax subsidies
- Shift to artificial intelligence and automation reduces value of unskilled labor
- Requirement for abundant, low-cost, reliable, green energy and water supplies

Rising global tariffs; improving Asia-Pacific trade relations

Developed markets are becoming more protectionist; within Asia the RCEP is reducing tariff barriers

6 Global green transition

Climate change will shift investment priorities

- Investment requirements require deeper capital markets
- Ignoring CO₂ invites a protectionist response

7 US-China innovation leadership

Innovation is now dominated by the US and China, with different approaches but leveraging common advantages

- Large domestic markets
- Strong tertiary academic institutions
- Massive R&D spend by corporates
- Long investment horizons by governments





1993–2023 Southeast Asia Economic Outcomes

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Our growth framework considers three broad drivers of economic growth potential

2

Situational/contextual factors that prompt policy change and benefit agile countries Traditional growth drivers: the building blocks of a high-growth economy

- Ease of doing business
- Increase competition
- Strengthen institutions
- Improve workforce quality and availability
- Build infrastructure
- Increase stability
- Facilitate investment

Five new growth drivers that require strategic insight, policy change, good government, and risk-taking

- Invest in emerging growth sectors
- Foster tech-enabled disruptors (TEDs)
- C. Strengthen capital markets
- D. Accelerate green transition
- Embrace multilateral initiatives

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3



Southeast Asia Macro Scenarios (Over Next 10 Years)

	LOW GROWTH	EXPECTED GROWTH	HIGHER GROWTH
China Health	China slowdown (growth at 2%–3%)	China maintains steady growth (growth at 3.5%–4.5%)	China rebounds (growth at 5%+)
China-US Competition	US and China demand alignment, splintering ASEAN	US-China relations frosty, compete for favor; Southeast Asia benefits	US-China relations improve as both prioritize domestic challenges
Global Trade	Rising protectionism hits Southeast Asia	Rising protectionism in US and Europe offset by trade growth within Asia	US and Europe back off from raising tariffs
Global Interest Rates	China real estate/banking crisis and US deficits and inflation lead to high real interest rates	Moderate global GNP and trade growth; acceptable real interest rates	Global growth picks up with benign inflation and interest rates
Green Transition	Southeast Asia delays green investing	Green investments accelerate, benefiting from low-cost China manufacturers and BRI	China accelerates investment to Southeast Asia hard infrastructure and green transition
Taiwan	Conflict	Simmering tensions but no conflict	Status quo
Impact of Technology	Al and automation displaces jobs	Productivity gains slightly higher than disruption to affected labor markets	New levels of productivity unlocked, measurable growth



SEA-6 is expected to grow ~5% on average annually over 2024–2034

		FORECAST		
	2000-09	2010-19	2020-23	2024-34
Vietnam	6.9%	6.6%	4.6%	6.6%
Philippines	4.5%	6.4%	2.3%	6.1%
Indonesia	5.3%	5.4%	3.0%	5.7%
Malaysia	4.7%	5.4%	2.5%	4.5%
Thailand	4.3%	3.6%	0.0%	2.8%
Singapore	5.4%	5.0%	2.7%	2.5%
SEA-6	5.1%	5.3%	2.6%	5.1%



Vietnam, Indonesia, and the Philippines are expected to be the faster-growing countries, with Vietnam continuing to stay ahead

	HIST	ORICAL AVE	RAGE	FORECAST		
	2000-09	2010-19	2020-23	2024-34	Positive drivers 🕥	Negative drivers 🕠
Vietnam	6.9%	6.6%	4.6%	6.6%	 Export-oriented economy well-positioned to capture "China + 1" opportunities Highly diverse sources of FDI Productive inter-provincial competition High-quality workforce and education levels 	 Collateral impact of anti-corruption campaign Cyclical slowdown and credit weakness Pace of infrastructure spend falling short Energy and water shortages Slow movement on green infrastructure
Philippines	4.5%	6.4%	2.3%	6.1%	 Pro-growth administration Prioritized infrastructure investments, with renewable projects garnering interest from FDI investors Growing population and workforce 	 Traditional growth drivers lagging other Southeast Asian countries (education, infrastructure, government effectiveness) Geopolitics, especially tensions with China, might escalate, disrupting recovery
Indonesia	5.3%	5.4%	3.0%	5.7%	 Booming base metal processing, mining, and infrastructure sectors Increasing infrastructure spend Leader in entrepreneurial, tech-enabled disruption Growing population and workforce 	 Low manufacturing value-added activity, beyond commodities Declining commodity prices Potentially more populist stance May further embrace protectionist slant



Malaysia, Thailand, and Singapore are expected to experience more gradual growth rates, over all SEA-6 as a region will grow healthily

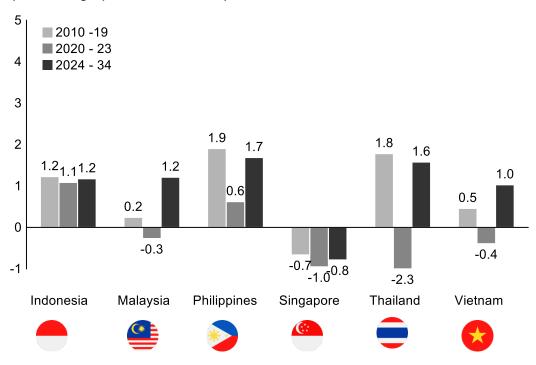
	HISTORICAL AVERAGE		RAGE	FORECAST				
	2000-09	2010-19	2020-23	2024-34	Positive drivers	Negative drivers 🕠		
Malaysia	4.7%	5.4%	2.5%	4.5%	 Shifting to pro-growth stance to attract FDI Past success with electronics, semiconductors and data centers paying off Willingness to pursue structural reforms, e.g. subsidy cuts Potential benefits from cooperation with Singapore 	 Shifting political coalitions, policy shifts and weak government mandates Slow and steady talent drain Fallout from not fulfilling long-term investment commitments (e.g. high-speed rail link) 		
Thailand	4.3%	3.6%	0.0%	2.8%	 Green shoots in tourism rebound A key regional automotive hub with well-connected infrastructure Conglomerates (CP, Central, PTT, Siam Cement, Thai Union) are more regional than Southeast Asian peers 	 Uncertain and turbulent political landscape Concerning consolidation in key sectors (retail, telecommunications) Demographic challenges 		
Singapore	5.4%	5.0%	2.7%	2.5%	 Open and diverse economy, with strengths in advanced manufacturing, services, and tourism World-class talent from every major economy attracted to safe, stable environment Well-funded government efforts to nurture growth 	 Demographic challenges; immigration offset faces political hurdles Land and labor constraints High business costs vs. SEA-6 peers 		
SEA-6	5.1%	5.3%	2.6%	5.1%	 Benefitting from China + 1 Third largest global "market" with 600 million + consumers Strong historical linkages with all major trading economies Geographic position in Asia, almost half of world population 	 Needs to be approached as individual country markets Increased protectionism in developed markets Gradual deindustrialization due to the changing drivers of competitiveness 		



Forecasting Model Breakdown: Total factor productivity and capital growth

Total Factor Productivity

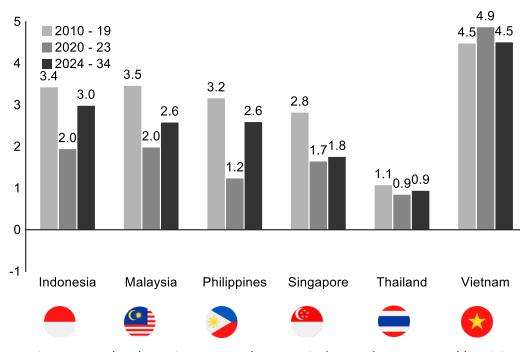
(Percentage point contribution)



- Total factor productivity (TFP) is often seen as a residual of other growth factors, reflecting the boost from reforms and other structural improvements.
- TFPs are, by and large, expected to be better/stable in the next decade.

Capital

(Percentage point contribution)



- Vietnam and Indonesia to see robust capital growth, supported by rising semiconductor and electric vehicle batteries FDI; the Philippines to be supported by infrastructure
- Capital growth in Malaysia and Singapore to benefit from global supply chain recalibration and green transition, while Thailand wins in attracting electric vehicle FDI

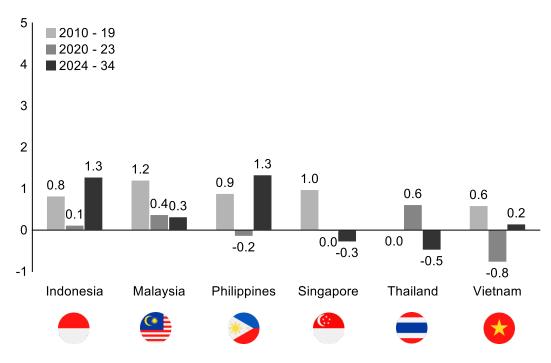
Sources: CEIC; IMF; Penn World Table; DBS



Forecasting Model Breakdown: Growth in labor force and labor productivity

Labor

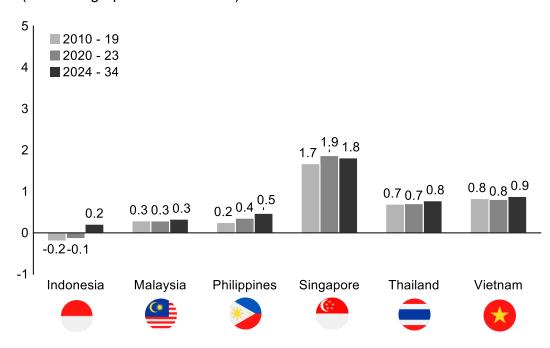
(Percentage point contribution)



- Labor force growth will be most supportive for the Philippines and Indonesia, and positive in Malaysia.
- Vietnam has a window over the next decade to reap demographic gains.
- There is a demographic drag for Singapore and Thailand.

Human capital

(Percentage point contribution)



- Singapore is already highly educated, with human capital supported by continuous upskilling efforts.
- Vietnam and Thailand can be supported by higher tertiary education and onthe-job training.
- Upskilling initiatives, education, and availability of quality health facilities should help this trend.

Sources: CEIC: IMF: Penn World Table: DBS



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Strategy is about redirecting resources to future opportunities

A emerging growth sectors

- Prioritize emerging sectors that fit with established clusters, workforce capabilities, and natural resources
- Stimulate sustained investment across multiple participants
- Invest heavily in workforce skills and infrastructure
- Develop government capabilities

Foster techenabled disruptors

- Provide low-cost, stable, accessible, regionally connected digital infrastructure
- Support co-location of stakeholders critical to a robust ecosystem of innovation and entrepreneurship
- Ensure enabling government policies: pro-competition, easy movement of talent, encouraging financial regulations to set up businesses

Strengthen capital markets

- Encourage growth of diversified players to ensure efficient capital allocation
- Increase stock
 exchange
 attractiveness to
 facilitate successful
 exits
- Increase household participation in financial markets
- Support new companies and financing of SMEs
- Ensure safeguards in place to avoid fraud and overspeculation

Accelerate green transition

- Prioritize easier wins
- Improve access to lowcost energy with climate, economic, and energy security benefits
- Upgrade national grids to renewables and work towards an interconnected regional grid
- Encourage
 government-led
 catalytic financing
 and other financial
 innovation for non commercially viable
 opportunities

Embrace multilateral initiatives

- Strengthen existing trade agreements and alliances such as ASEAN or RCEP
- Prioritize **key growth- enabling initiatives**that benefit from a
 regional approach
- Common standards
- Unified electrical grid
- Digital payments
- Carbon markets





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We see opportunities for each of the ASEAN-6 to improve their pursuit of next-generation growth opportunities

Lowe	Lowest in Sea Top in SEA									
DR	IVERS	YEAR	ID 🛑	мү	РН 🥎	SG 🤷	тн 🛑	VN 😝		
	Invest in	Global Innovation Index ranking	Overall GII ranking (1–149)	2023	61	36	56	5	43	46
Α	New Growth Sectors	5-year average R&D expenditure as percentage of GDP	% of GDP	2017–21	0.3%	1.0%	0.3%	1.9%	1.1%	0.4%
	Sectors	5-year average private tech investment	USD B	2018-22	11.3	4.3	1.6	35.3	5.5	4.7
В	Foster Tech- enabled	Number of unicorn start-ups ¹	# of companies	2023	15	1	2	27	4	5
Б	Disruptors	Tech venture capital investment	USD M	2023	1,140	332	148	7,934	108	224
С	Strengthen Capital	Credit as percentage of GDP	% of GDP	2018–22	79.0	214.8	57.3	347.5	232.2	132.0
	Markets	Corporate bond market cap as percentage of GDP	% of GDP	2018-22	2.3	54.0	7.3	27.5	25.6	7.7
		5-year average greenhouse gas emission per capita	tCO2e per capita	2016–21	5.8	11.4	2.1	11.6	6.2	4.2
D	Accelerate Green	Share of electricity production from renewables	% share of production	2022	19.6%	19.1%	21.6%	2.4%	15.5%	50.3%
	Transition	Total value of investments in green sectors ²	USD M	2023	1,593	1,029	1,464	913	394	199
		Electric car sales	% share of sales	2022	1.3%	0.7%	0.7%	6.0%	3.7%	1.7%
E	Embrace Multilateral	Share of intra-ASEAN trade in goods	% value of goods traded	2022	21.0%	27.1%	24.9%	25.7%	21.7%	11.1%
_	Initiatives	Share of intra-ASEAN FDI inflows	% of FDI inflows	2022	33.0%	18.7%	7.4%	4.4%	35.7%	25.1%

Notes: (1) A unicorn is a privately held start-up company with a valuation of \$1B or more; the analysis includes start-ups that reached \$1B valuation by 2017 onwards and considers mainly companies with publicly disclosed valuation data; (2) Figures include private sector deal transactions >\$10M in size, including private placements and excluding IPOs; amount not representative of overall private sector investment Sources: World Intellectual Property Organization; Pitchbook; Capital IQ; World Bank; SEA Green Economy Report 2023 (Bain & Company, AWS, and GenZero); Euromonitor; Global Forest Watch; Ember Yearly Electricity Data (2023)



Improvements in the past five years are evident; Indonesia and the Philippines are making strong progress across most dimensions

Declir	ning performance	Improving performance		$ \begin{array}{c} \text{GROWTH TRENDS} \\ \hline (3) & \hline (3) & \hline (4) \end{array} $					
ou	ТСОМЕ	INDICATOR	YEAR	ID 🛑	мү	PH 🤛	sg 🥮	тн 🛑	VN 😝
	Invest in	Global Innovation Index ranking (rank change)	'23 vs. '18	+24	-1	+17	0	+1	-1
Α	new growth sectors	5-year avg. R&D expenditure as percentage of GDP	'17-'21 vs. '12-'16	+54%	-21%	+123%	-5%	+98%	+28%
	sectors (5-year avg. private tech investment	'18-'22 vs. '13-'17	147%				+235%	
В	Foster tech- enabled	Number of unicorn start-ups ¹	'23 vs. '19	114%	No unicorn start-up in 2019	+100%	+145%	No unicorn start-up in 2019	+400%
Б	disruptors	Tech venture capital investments	'23 vs. '18	-63%	+90%	+107%	+50%	-48%	-22%
С	Strengthen capital	Credit as percentage of GDP	'22 vs '18	+9%	0%	+4%	+13%	+20%	+16%
	markets	Corporate bond market cap as percentage of GDP	'22 vs. '18	-18%	+11%	+1%	-9%	+21%	+285%
		5-year avg. GHG emission per capita	'10-'15 vs. '16-'21	-12%	+75%	+17%	+4%	+13%	+43%
D	Accelerate the green	Share of electricity production from renewables	'22 vs. '18	+15%	+15%	-8%	+82%	+9%	+23%
	transition	Total value of investments in green sectors ²	'23 vs. '20	+383%	+681%	+145%	+47%	-90%²	-77%
	•	4W BEV share of new vehicle sales	'21 vs. '22	16x	12x	6x	2x	2x	3x
E	Embrace multilateral	Share of intra-ASEAN trade in goods	'22 vs. '18	+21%	+40%	+36%	+27%	+26%	+44%
	initiatives	Share of intra-ASEAN FDI inflows	'22 vs. '17	-28%	+45%	0%	+11%	+122%	+80%

Note: (1) A unicorn is a privately held start-up company with a valuation of \$1B or more; the analysis includes start-ups that reached \$1B valuation by 2017 onwards and considers mainly companies with publicly disclosed valuation data; (2) Figures include private sector deal transactions >\$10M in size, including private placements and excluding IPOs; Amount not representative of overall private sector investment | Source: World Intellectual Property Organization; Pitchbook; Capital IQ; World Bank; SEA Green Economy Report 2023 (Bain & Company, AWS, and GenZero); Euromonitor; Global Forest Watch; Ember Yearly Electricity Data

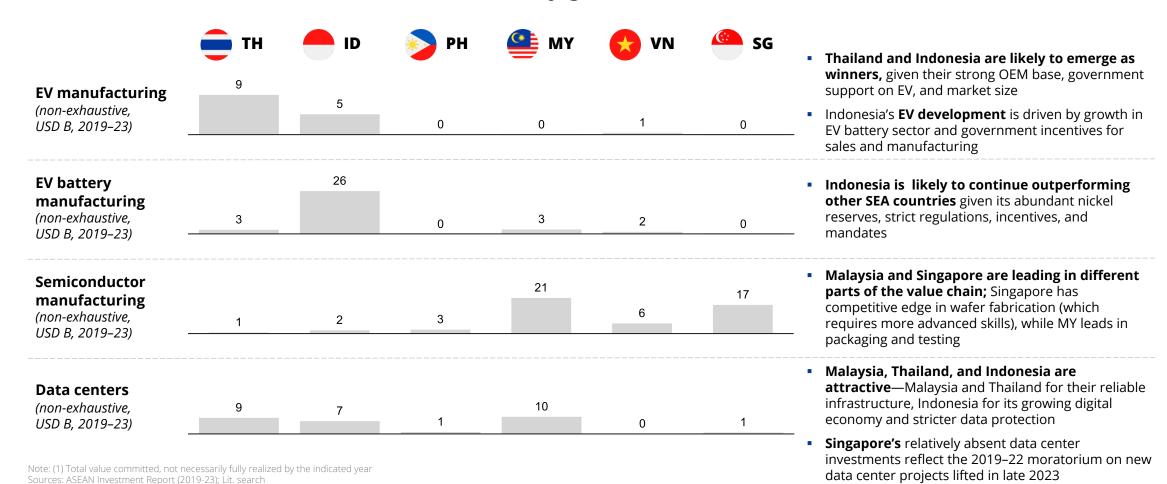
- New growth sectors have seen positive trends, including a substantial increase in private tech investments and unicorn start-ups
- Green transition has been driven by investments in green sectors and EV adoption, propelled by attractive government inves aimed at both investors and consumers
- Indonesia and the Philippines, which start from a lower base, are moving in a positive direction, especially in economic innovation
- Thailand and Vietnam have seen more nuanced growth across dimensions, esp. in green transition





Invest in Emerging Growth Sectors: SEA countries are competing for next-generation sectors; a few winners are emerging

Cumulative FDI value committed to SEA for key growth sectors¹

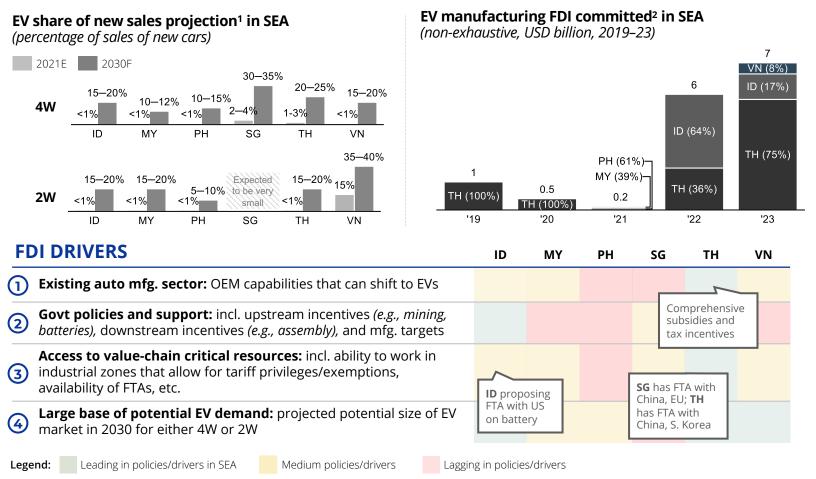




A

Invest in Emerging Growth Sectors – Electric Vehicles (EVs) EV adoption in SEA is nascent but expected to reach double digits by 2030; Thailand is likely to lead FDI in 4W, Indonesia and Vietnam in 2W

MARKET AND FDI OVERVIEW



IMPLICATIONS

Thailand is likely to emerge as the winner in attracting FDI for 4W EV manufacturing with its strong existing combustion engine OEM presence, comprehensive government support, and large potential market size

Indonesia and Vietnam have potential to win in the 2W EV manufacturing with their large domestic markets and growing OEM presence

Other SEA-6 can focus on attracting FDI for EV components (e.g., Indonesia on EV battery manufacturing and tires, Singapore and Malaysia on automotive semiconductors, etc.)

Notes: (1) Captures Battery EV (BEV) projection only; (2) Total value committed, not necessarily fully realized by the indicated year Sources: ASEAN Investment Report (2019–2023); International Energy Agency (IEA); Fitch; Maybank; Govt. websites; Industry participant interviews; Bain analysis; Lit. search





Invest in Emerging Growth Sectors – EV Manufacturing Largest recent investments are concentrated in Thailand and Indonesia, driven by policy initiatives and its existing manufacturing bases

Selected recent EV manufacturing investments in SEA¹

NON-EXHAUSTIVE

Player	Value (USD M)	Year	Market	Investment overview	Investment drivers
1 Toyota	1,800	2022	ID	To leverage Indonesia as regional manufacturing hub for Toyota's EV (for both battery and hybrid EVs) over the next five years	Abundant nickel resources, Indonesia government's EV ambition, and existing local supplier network
Toyota	622	2019	TH	To boost production of hybrid EVs in response to rising competition from Chinese EV manufacturers	Government's investment privileges—excise tax reduction to establish full EV production
2 BYD	500	2022	TH	Annual capacity will be 150,000 units ; BYD currently has 46% of the Thai EV market	Established car manufacturing ecosystem; promising local market; opportunity to bypass tariffs from direct China export
3 Vinfast	1,200	2023	ID	To build EV and battery manufacturing plant, with an anticipated production capacity of 30,000–50,000 units annually	To leverage Indonesia government's incentives and access to nickel resources
4 Ford	900	2022	TH	To modernize its existing manufacturing operations by enhancing level of automation by 80% and increasing output of new models, incl. EVs	Recognized Thailand's growing significance as key manufacturing hub in APAC after the closure of Ford's operations in other regions (India, Russia, and Brazil)
5 Mitsubishi	543	2020	TH	To improve EV manufacturing plants and expand overall production; at the end of 2020, Mitsubishi launched its first PHEV as Thailand entry	To capitalize on rapidly expanding EV market in SEA and utilize Thailand as central manufacturing hub

Note: (1) Total EV investments committed in that year, not necessarily fully realized in that year. Source: Lit. search

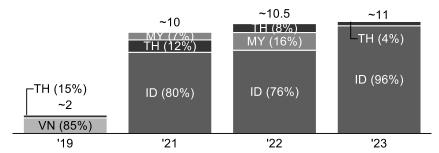




Invest in Emerging Growth Sectors – EV Batteries FDI in SEA has surged from 2021, driven by Indonesia. It has been the main recipient given its nickel resources and policy initiatives

MARKET AND FDI OVERVIEW

EV battery manufacturing FDI committed¹ in SEA (non-exhaustive, USD billion, 2019–23)



- EV battery manufacturing FDIs started to pick up in 2019 and have grown by 5x
- **Key FDIs in Indonesia include:**
 - Volkswagen is working with Vale, Ford, Huayou, Eramet, and local companies to build an EV battery ecosystem in Indonesia, and conducted a feasibility study for a USD 5 billion plant
 - CATL invested USD ~5 billion as part of vertical integration (nickel mining / processing and battery manufacturing)
 - Hvundai's first battery system assembly in Southeast Asia, with annual capacity of 10GWh battery cells (enough for ~150,000 EVs)

FDI DRIVERS ID TH MY PH SG VN Availability of raw materials (nickel)—most common Access to batteries, NCA and NCM², use ~80% and ~30% nickel value-chainrespectively Has world's critical largest nickel Ability to work in **industrial zones** that allow for tariff resources: reserves privileges/exemption Govt policies & support: incentives, local battery manufacturing targets Existing base of lithium-ion battery manufacturing: building on existing synergies and knowledge transfer to produce EV batteries in the future Has largest lithium-ion battery factory in SEA Potential presence of EV manufacturers/assembly plants: localizing supply chain to optimize costs Lagging in policies/drivers Leading in policies/drivers in SEA Medium policies/drivers

IMPLICATIONS

Indonesia is likely to emerge as the FDI winner in attracting FDIs for EV battery with its abundant nickel resources, set of incentives, and willingness to mandate down-streaming

Other SEA-6 countries need to set thoughtful strategies that recognize the sources of competitive advantage: product and process technology, scale, access to low-cost materials, and committed offtake

Numerous opportunities exist in other components of the **EV** value chain (e.g., semiconductors, tires, glass, powertrains, etc.)





Invest in Emerging Growth Sectors – EV batteries Indonesia is getting investments from world-renowned players in the space, such as Foxconn, Hyundai, LG

Player	Value (USD M)	Year	Market	Investment overview	Investment drivers
1 Foxconn	8,000	2022		Partnered with coal miner Indika Energy to manufacture both batteries and EVs; plans to bring in new partners to establish extensive EV ecosystem in Indonesia	To leverage Indonesia's massive nickel resources as a solid foundation to localize EV manufacturing
2 CATL	5,200	2021	- ID	Invested as part of Indonesia Battery Integration Project , which included nickel mining/processing, and battery materials, manufacturing, and recycling	Indonesia's nickel supply and tax incentives can help CATL secure stable global EV expansion base through steady stream of raw materials and low manufacturing costs
3 Hyundai	1,500	2021		Hyundai's first battery system assembly in SEA with two factories: Cikarang (100% Hyundai-owned) & Karawang (co-owned with LG)	To leverage existing factory base to win Japanese-
4 Hyundai & LG	1,100	2021	_	Annual capacity of 10GWh battery cells (enough for ~150,000 EVs); to leverage NCMA technology ² to secure competitive edge in performance & costs	dominated Indonesian car market and expand into the rest of Southeast Asia
5 Evlomo	1,060	2021	TH	The battery factory to have final capacity of 8GWh and will be used for domestic and exports	Government incentives support Evlomo to have the early mover advantage in the largest OEM manufacturing base in SEA

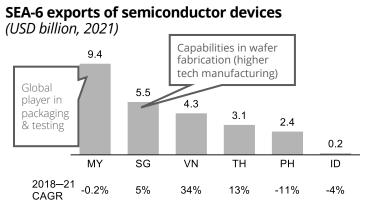
Notes: (1) Total investments committed in that year, not necessarily fully realized; (2) NCMA: nickel, cobalt, manganese, and aluminum-based battery cells containing 90% nickel; better performance and costs by using less cobalt, more aluminum. Source: Lit. search

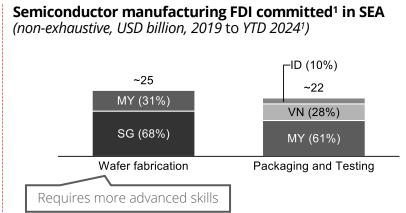




Invest in Emerging Growth Sectors – Semiconductors SEA-6 has a role to play with diversification away from China; Singapore and Malaysia are ahead of their peers

MARKET AND FDI OVERVIEW





FDI DRIVERS ID MY PH SG TH VN Existing semiconductor manufacturing base: manufacturers' presence, ecosystem, and infrastructure Produced ~5% global **Government policies and support:** incentives, manufacturing targets 13% wafer packaging Reliability of basic infra.: e.g., electricity, ultrapure water supply fabrication globally output Availability of **skilled labor:** critical to grow front-end manufacturing that (largest in requires more specialized skills SEA) Presence of low-cost labor: low-cost labor important for back-end manufacturing, which is relatively less skill-intensive Intellectual property protection: IP index score is a measure of the overall strength and effectiveness of a country's IP framework Leading in policies/drivers in SEA Medium policies/drivers Lagging in policies/drivers

IMPLICATIONS

As global players seek to diversify their supply **chains**, it is critical for SEA-6 to **continue** upgrading their capabilities to capture the investments

Singapore and Malaysia are leading in different value chain processes; while Singapore has a competitive edge in wafer fabrication, Malaysia has developed in packaging and testing

Opportunity for **Singapore to continue** attracting FDI in legacy process nodes (22-28nm onwards) given existing semiconductor ecosystem to build off

- However, small overall footprint today, with less than 4% of global foundry capacity in Singapore and Malaysia combined
- Risk of over-capacity on some legacy nodes given China capacity increase (for their large domestic consumption)

For **other countries**, opportunity to gain capability in packaging and testing—less technologically intensive and more laborintensive

BAIN & COMPANY (4)

Notes: (1) Total value committed, not necessarily fully realized by the indicated year; Investments as of 6 June, 2024 Sources: Observatory of Economic Complexity latest database (2021); ASEAN Investment Report (2019–23), Lit. search; Gartner





Invest in Emerging Growth Sectors – Semiconductors Some of the largest players have invested in Singapore and Malaysia, such as Intel, UMC, Global Foundries, Infineon

Selected recent semiconductor investments in SEA¹

NON-EXHAUSTIVE

	Player	Value (USD M)	Year	Market	Investment overview	Investment drivers
Wafer fabrication	Vanguard (VIS) and NXP	7,800	2024	SG	Joint venture with NXP, for 12-inch fabrication focused on 130–40nm process nodes	Further diversification of fabrication footprint outside of Taiwan to meet customer demand for local manufacturing
	Infineon	7,000	2022/23	MY	8-inch SiC fabrication focused on next-gen power applications, expected to generate ~USD 7 billion of incremental revenue	Malaysia serves as a key regional hub for Infineon, offering favorable environment and talented workforce that support sustained growth
	имс	5,000	2022	SG	Capacity expansion focused on 22–28nm process node, with monthly capacity of 30,000 wafers	Strong pool of highly educated talents , government support to expand existing fabrication in Singapore
	Global Foundries	4,000	2021	SG	Expand existing fabrication footprint ; facility to produce additional 450,000 12-inch wafers annually	The company aimed to diversify the production amid geopolitical turmoil and further establish global fabrication footprint
Assembly & Testing	Intel	7,100	2021	MY	To build new advanced packaging and testing factory in Penang, the first overseas facility for 3D chip packaging	Malaysia is an established center for testing and assembling in SEA and Intel has had manufacturing facility in MY for 50+ years
	Samsung	3,300	2022	VN	First chip production plant in Vietna, to produce a high-performance semiconductor packaging substrates	Recognized Vietnam's potential as a reliable (coupled with govt. support) and cheaper alternatives to existing manufacturing hubs
	Texas Instruments	3,100	2023	MY	Build out two new assembly and test facilities in Kuala Lumpur and Melaka	Texas Instrument's longstanding presence within Malaysia and ambition to bring ~90% of assembly and test operations in-house by 2030

Note: (1) Total investments committed in that year, not necessarily fully realized in that year Source: Lit. search

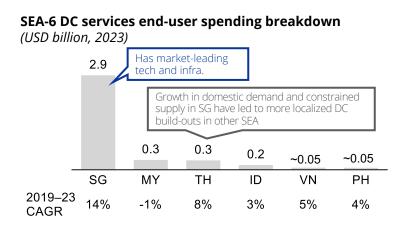


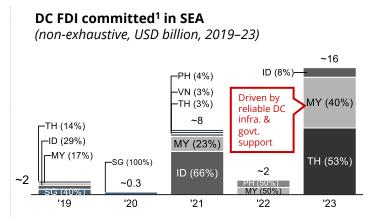


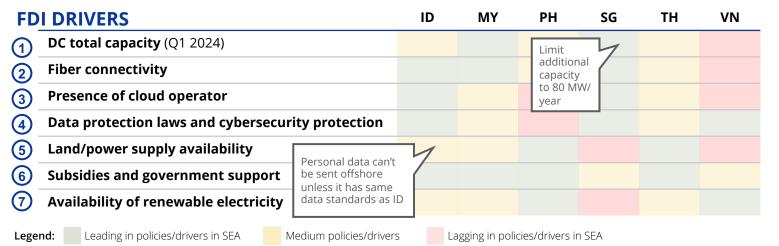
Invest in Emerging Growth Sectors – Data Centers

FDIs in SEA have surged since 2021 due to the growth of cloud services and AI; Indonesia and Malaysia have emerged as attractive regional hubs

MARKET AND FDI OVERVIEW







While Singapore is currently the largest data center market in SEA, other countries have emerged as attractive FDI destinations—Malaysia and Thailand for their reliable infrastructure and Indonesia for its growing digital economy and relatively strict data protection laws

Malaysia and Indonesia (particularly the states of Johor and Batam) are expected to benefit from Singapore's slowdown in data center capacity given Singapore's cap on data centers and stringent criteria around new data centers applications due to its limited land availability and the tremendous electricity demands

With rising construction and electricity costs in Malaysia and Indonesia, the Philippines and Vietnam can make a better play for sustainable data centers with better policies and incentives to lure hyperscale players

BAIN & COMPANY (4)

Note: (1) Total value committed, not necessarily fully realized by the indicated year Sources: Gartner IT Services Forecast; ASEAN 2023 Investment Report; Refinitiv: Infra 360; DC Byte SGP Data Centre Market Trends; Cushman and Wakefield Global Data Center Market Comparison Report; RedSeer; Energy Institute



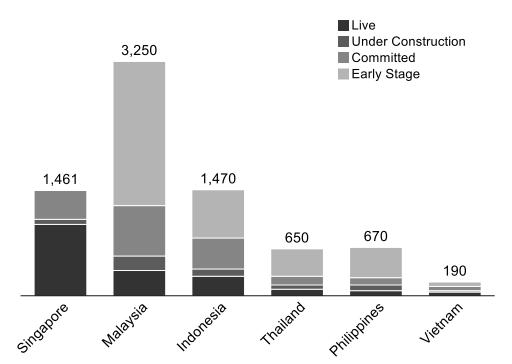
Invest in Emerging Growth Sectors – Data Centers

Malaysia and Indonesia have plans to significantly grow their IT capacity in the next few years. The availability of green energy and rising energy costs are significant challenges

While Singapore has the highest live IT capacity, Malaysia and Indonesia are fast catching up. Vietnam is severely lagging due to poor connectivity and lack of hyperscale players

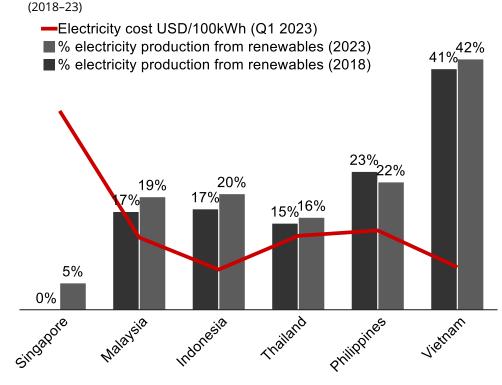
Total IT Capacity

(Q1 2023, in MW)



Singapore's electricity cost is high and availability of green energy is low; the Philippines and Vietnam have some opportunity leverage its green energy potential to draw more investments

Electricity costs (in kWh) and Percentage of electricity production from renewables



Sources: Gartner IT Services Forecast, ASEAN 2022 Investment Report, Refinitiv: Infra 360, DC Byte, Cushman and Wakefield Global Data Center Market Comparison Report, Energy Institute-Statistical Review of World Energy), Lit. searc





Invest in Emerging Growth Sectors – Data Centers Recent investments have been made by hyperscale cloud players such as AWS, Microsoft, and Google

NON-EXHAUSTIVE

Player	Value (USD M)	Year	Market	Investment overview	Investment drivers
	8,880	2024	SG	Expand existing cloud infrastructure in Singapore	To capture growing customer cloud computing needs, expand partnership with Singapore government
1 AWS	6,000	2023	MY	Build a cloud region/cluster of data centers across three availability zones (on top of existing ones in Indonesia & Singapore); FDIs spread out until 2037	To keep up with rapid adoption of cloud services and meet data localization requirement
	2,800	2023	TH	Build data center in Bangkok (adding to existing infra FDIs incl. AWS Outposts, Amazon Cloudfront) with value to be realized within 15 years	To bring more advanced cloud computing services to more organizations
	2,200	2024	MY	Build out new cloud and Al infrastructure; FDI to be spread out until 2028 ; Purchased land in Iskandar, Johor	To meet growing demand for cloud computing services, expand partnership with MY government
2 Microsoft	1,700	2024	ID	Build out new cloud and Al infrastructure in Indonesia; FDIs to be spread out until 2028	Expand partnership with ID government, capture growth opportunities within ID's digital economy
	Undisclosed	2024	TH	Build out new cloud and AI infrastructure in Thailand and establish the country as a new data center region	Expand Microsoft's hyperscale cloud services, meet demand cloud computing services in the country
3 YTL and Nvidia	4,300	2023	MY	Build an AI cloud and supercomputer infrastructure facility within the YTL Green Data Center Campus in Johor, powered by a renewable energy source from its on-site solar power facility	Availability of land and proximity to Singapore
4 Google	2,000	2024	MY	Build out first data center and cloud facility in Malaysia within Elmina Business Park in Selangor	Malaysia government's digital commitments as part of its New Industrial Master Plan 2030 , help users maintain security and compliance standards
AirTrunk and ByteDance	Undisclosed	2023	SG	One of four data center operators through the pilot DC-CFA exercise to be awarded about 80 MW of new capacity; Focus on key compute capacities such as AI and machine learning	Singapore initiative focused on development of green data centers with lower carbon emissions and higher efficiency

Note: (1) Total investments committed in that year, not necessarily fully realized in that year Sources: ASEAN Investment Report (2018–23); Refinitiv: Infra 360; Lit. search





Invest in Emerging Growth Sectors Each country had growth planning failures which provide lessons

Sector	Situation and challenges			
Aircraft Manufacturing	Indonesia spent billions trying to develop its own aircraft manufacturing over the last 40 years, but faced several challenges including: - Financial constraints and difficulties in securing consistent funding given the capital-intensive nature of the industry - Challenges in acquiring and retaining necessary technical talent - Absence of robust infrastructure and limited access to advanced technology			
Cyberjaya "Silicon Valley of Malaysia"	Cyberjaya was launched in 1997 as a world-leading IT entrepreneurial hub. Even though it has hosted hundreds of companies, has not turned into an innovation hub: - Development was led by government's central planning rather than market-driven dynamics, hindering alignment with evolving needs of the tech industry - Incentive misalignment, e.g., MNCs can enjoy tax incentives by setting operations anywhere in Malaysia and not specific for Cyberjaya			
Rice Farming	Despite abundant agricultural land, PH has struggled to produce enough rice and is the world's top rice importer. Key drivers include: - Low agricultural productivity and low level of investment for agricultural R&D - Domestic rice is more expensive than imported rice			
EV Manufacturing	Singapore is not well-suited for automotive assembly, but has continued to attempt to establish a base - High input costs including labor, land, and operations - Lack of a robust local ecosystem for vehicle manufacturing - Small domestic market with high tax rates for car ownership			
High-tech Manufacturing	While ~30% of Thailand's GDP is supported by manufacturing, a significant portion comprises assembly-related activities. Growth of high-tech manufacturing has been relatively muted despite the presence of MNCs due to: - Limited R&D investment as compared to leading countries in technology industries - Competition from other hubs for professionals in high-tech manufacturing			
Design Manufacturing	 While Vietnam has successfully upgraded its manufacturing from assembly to higher value-added production, its design manufacturing is still nascent. Potential reasons include: Shortage of professionals with high-level design skills and experience Insufficient R&D given that investment in R&D for nurturing innovation and design capabilities is relatively low Challenges in IP protection; Vietnam's IP index score is only ~40%, compared to Singapore at ~85%) 			
	Aircraft Manufacturing Cyberjaya "Silicon Valley of Malaysia" Rice Farming EV Manufacturing High-tech Manufacturing Design			

Source: Lit. search

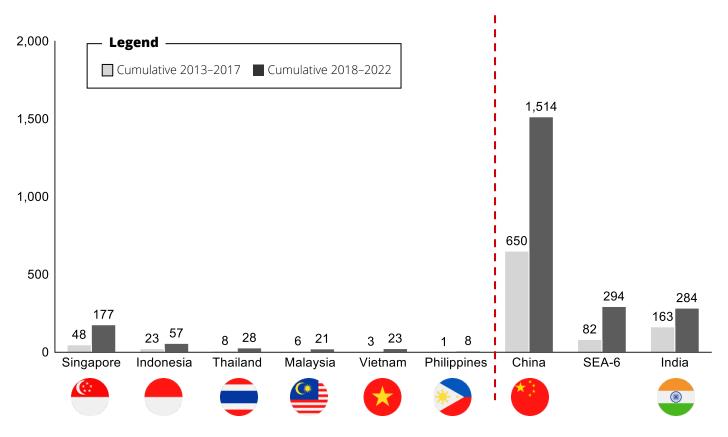




Promote Tech-enabled Disruptors (TEDs)

Total value of private tech investment deals in SEA has increased significantly, with Singapore and Indonesia witnessing largest deal flows

Total five-year cumulative value of private tech investment deals (2013–22, USD billion)



- Southeast Asia's tech sector has witnessed remarkable investment growth, outpacing both China and India
- Singapore and Indonesia emerged as the countries with biggest inflows of tech investment deals over the last few years
 - **Singapore**'s growth in tech deal flows is bolstered by initiatives such as the Tech.Pass visa program, which attracts global tech talent, and the Research, Innovation and Enterprise 2020 Plan that funds R&D across industries. The government also nurtures a vibrant start-up ecosystem through schemes like Startup SG.
 - Indonesia's position as the largest consumer market in Southeast Asia has been a key factor in attracting tech investment deals, bolstered by government initiatives like the "1000 Startups National Movement" and the supportive framework of the Indonesia Digital Roadmap.
- E-commerce, fintech, food and transport, and digital media are the sectors experiencing the most significant growth within Southeast Asia's tech industry

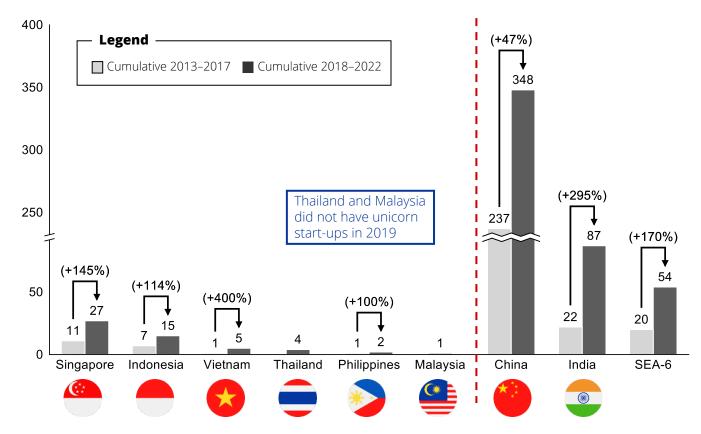
Source: Pitchbook





SEA's start-up ecosystem has grown rapidly, with the highest concentration of unicorn start-ups in Singapore and Indonesia

Number of unicorn start-ups in SEA¹ (2013–22, units)



Notes: (1) A unicorn is a privately held start-up company with a valuation of \$1 billion or more; the analysis includes start-ups that reached \$1 billion valuation by 2017 onwards and considers mainly companies with publicly disclosed valuation data. Sources: Tech in Asia; Dealroom; Capital IQ

- SFA has witnessed increased economic innovation. through a growing start-up ecosystem
- Singapore continues to lead as the region's tech hub
 - Singapore's start-ups usually serve the region and derive most of their revenues outside Singapore; this is less so the case for other SEA-6 countries
 - Singapore's vibrant start-up ecosystem surge stems from robust government support in talent attraction, strong partnerships with the private sector, strong IP laws, and a dynamic funding landscape
- Indonesia, Vietnam, and Thailand have experienced **rapid growth** in start-up ecosystems
 - Indonesia's growth trajectory is characterized by its burgeoning digital market, a large, digitally savvy consumer base, improvements in connectivity, and a focus on digital skills development
 - Vietnam's start-up scene is thriving, thanks to a supportive policy environment, improved access to funding beyond government-led initiatives, strong STEM talent availability, and a diaspora community that helps Vietnamese start-ups globally
 - Thailand has a well-developed start-up market and has recently launched a framework aimed at growing unicorns through a "unicorn factory"

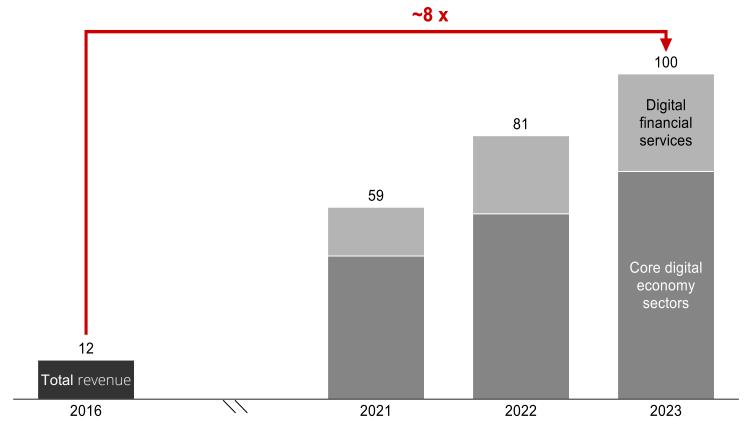




The digital economy has already reached USD ~100B revenue in Southeast Asia in 2023, from USD ~12B in 2016

Southeast Asia digital economy revenue

(2016-23, USD billion)



- Payments
- Lending
- Wealth
- Insurance
- E-commerce (marketplaces, groceries)
- Transport and food
- Online travel (flights, hotels, rentals)
- Online media (advertising, gaming, video/music)

BAIN & COMPANY (4)

Source: Southeast Asia e-Conomy Report 2023



Digital disruptors and tech-enabled incumbents have quickly emerged in recent years

NON-EXHAUSTIVE

BANKING AND **CONSUMER RETAIL TRANSPORTATION** LOGISTICS **INSURANCE** HEALTHCARE **EDUCATION PAYMENTS** Share of SEA-6 GDP 7%* 10%^ 4%^ 18% 8% JET EXPRESS bolttech sea Money 🥻 ELSA ኘ halodoc Shopee Al-language learning ~\$10B market cap² 3PL Insurtech exchange SEA's largest mobility Digital banking, payments. DISRUPTORS SEA's largest **ID-based digital** app with over 7m platform with ~\$50B+ provider with ~11M daily e-commerce¹ platform platform with ~\$15B and lending platform with healthcare provider with learners 101 countries quoted premiums annually parcel volume4 in SEA ~\$1.8B 2023 revenue market cap² with ~\$40B market cap² >20M monthly active ruang Qoala users, 20k practitioners gojek 🖰 gopay **ninjavan** Lazada **Digital insurance Primarily K-12 focused** Payments and lending SEA's 2nd largest SEA's 2nd largest 3PL provider with 2M platform offering retail focused platform with ID edtech platform mobility platform, IGITAL e-commerce platform, daily parcel volume and and microinsurance ~\$120M 2023 revenues with 22M+ learners owned by Alibaba primarily focused on ID ~\$700M FY 2023 revenue maua LingoAce tokopedia Mobility platform FLASH $\overline{\Box}$ focused on Vietnam SEA's 3rd largest **Embedded insurance** PH-focused digital Online learning platform **3PL provider** with e-commerce platform, providing ~120M rides for partners. D2C retail banking platform with for language learning, ~\$500M in 2023 revenue annually (2023) primarily focused on ID >10M learners worldwide insurance etc. ~3M depositors4 INCUMBENTS **FULLERTON** Sinalife Bluebird SG-based bank with strong ID's largest taxi brand, SG-based life SG-based healthcare Leading parcel digital transformation (named >\$250M revenue (2023) insurance firm, with delivery service with platform with digital World's Best Digital Bank) >\$2.5B annual GWP and strong app >\$80B revenue, with healthcare services in integration SG, PH, MY, etc. strong presence in ID, Bangkok Bank Asia-focused life SG. MY. PH TECH-ENABLED COMFORTDELGRO insurance with 42M+ One of **TH's largest banks** individual policies Leading SG taxi brand with >\$6B market cap with 40,000+ vehicles, SG multi-disciplinary Manulife **trust** medical services presence in 12

Insurance company with

strong digital strategy (e.g.,

partnership with Halodoc)

Note: Digital disruptors generally selected based on valuation/funding raised; Consumer retail primarily focused on e-commerce industry; (1) Based on 2022 GMV share estimates; (2) As of 7 June, 2024; (3) Q1 2024; (4) As of 2023; (*) Refers to total financial services, (^) Percentage of govt. and private expenditure as percentage of GDP | Source: Lit. search; Tech in Asia; Company websites

countries



SG-based Digital Bank

backed by Standard

Chartered and FairPrice



group, integrated with

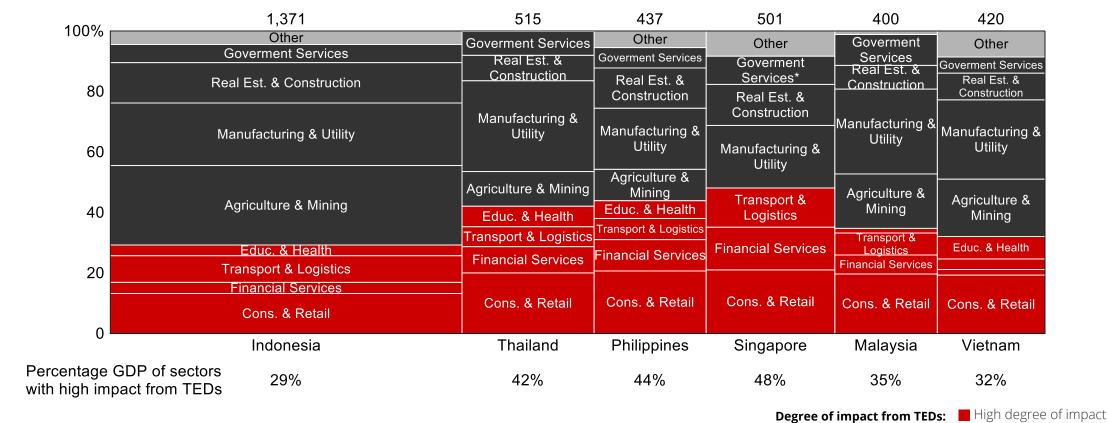
Doctor Anywhere

BAIN & COMPANY (4)

Around 30%-40% of SEA sectors will be impacted by TEDs

GDP by country and industry

(2023, USD billion) Total=~3,650



Notes: Key sectors include air travel, logistics, healthcare, education, consumer retail, financial services; others include value-add from household activities and undefined sectors; (*) Education and health data are subsumed under Government Services for Singapore | Source: Euromonitor

ANGSAN COUNCI

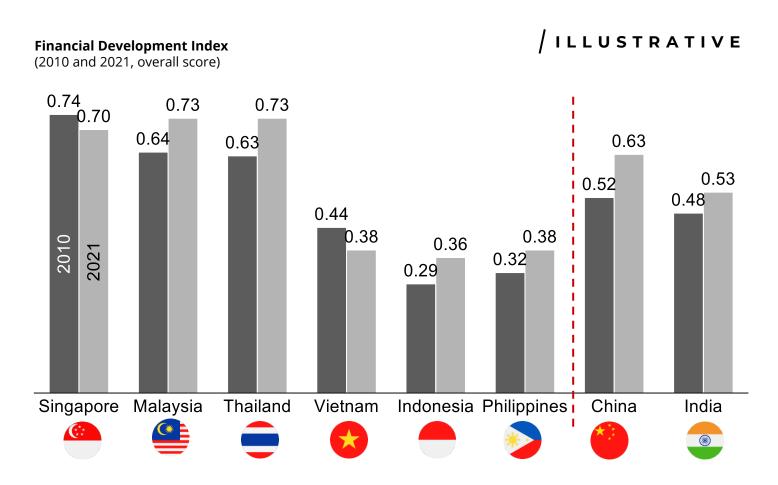




Low degree of impact



Singapore, Malaysia, Thailand lead the IMF Financial Development (FD) Index Trends; Singapore's score has dropped since 2010



Note: The IMF FD Index consists of six indicators, gauging the depth, access, and efficiency of both financial institutions and financial markets.

Sources: IMF; DBS

- Indonesia saw a significant improvement, driven by its increase in branchless and digital banking solutions to rural areas
- The Philippines has made slight progress across most of the dimensions (except for stock market performance)
- Vietnam encountered a decrease in FD Index, driven by poor stock market performance
- Singapore's Index is high at above 0.7, reflecting its financial center status; however, its score dropped between 2010 and 2021, driven by poor stock market performance
- Malaysia saw gains in financial market depth and efficiency, driven by stock market capitalization and performance
- Thailand has seen the most increase, driven by access to credit and stock market capitalization





Financial Development (FD) Index decomposition and changes

INDICATOR	DESCRIPTION	SG SG	9 МҮ	_ тн	♡ VN	ID	PH	@ СН	IN
Fl Depth	Bank credit to the private sector (% of GDP), pension fund assets (% of GDP), mutual fund assets (% of GDP), insurance premiums, life and non-life (% of GDP)	(①	①	①	①	①	①	(1)
FI Access	Bank branches (per 100,000 adults), ATMs (per 100,000 adults)	(Θ	1	Θ	1	①	①	(1)
FI Efficiency	Banking sector net interest margin, lending-deposits spread, non-interest income to total income, overhead costs to total assets, ROA, ROE	\Rightarrow	Θ	Θ	Θ	Θ	①	(Θ
FM Depth	Stock market capitalization (% of GDP), stocks traded (% of GDP), international debt securities of government (% of GDP), total debt securities of financial and nonfinancial corporations (% of GDP)	(①	①	Θ	Θ	①	①	(
FM Access	Market capitalization outside of top 10 largest companies (%), total number of issuers of debt (per 100,000 adults)	①	(Θ	Θ	1	Θ	\Rightarrow	\ominus
FM Efficiency	Stock market turnover ratio	(\bigcirc	Θ	\bigcirc	\bigcirc	Θ	\bigcirc	1
FD index	Compounded score from all sub-dimensions	((1	(1	①	①	1

Note: The IMF FD Index consists of six indicators, gauging the depth, access, and efficiency of both financial institutions (FI) and financial markets (FM). Sources: IMF; DBS

Score increased >0.05 Score changed within 0.05

Score decreased < -0.05

⊠DBS



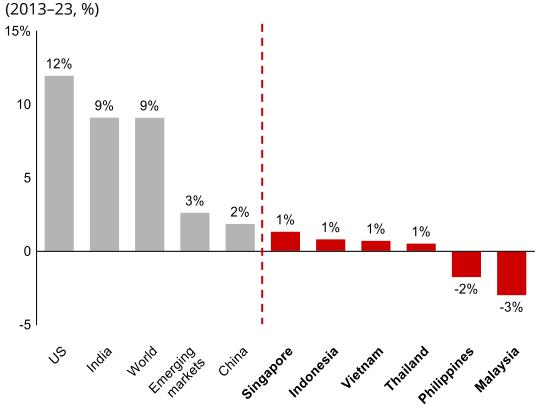




SEA equity markets' contribution to global markets' returns has decreased in the past 10 years

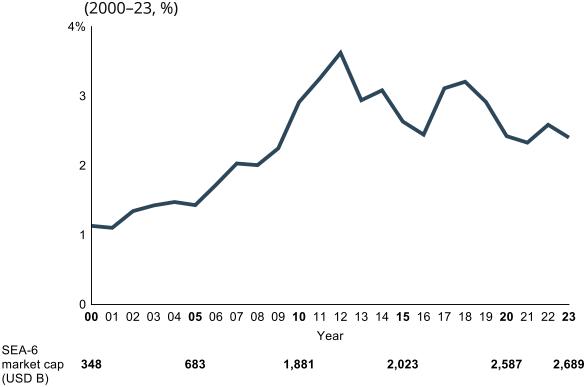
SEA-6 equity markets are underperforming peers with lower indices returns

MSCI equity indices 10-year return



SEA is only 2%-3% of global equity markets, with a declining share since peaking in 2012

SEA-6 market cap as percentage of global equity market cap



Note: 2023 global equity capitalization excludes Angolan Securities Exchange; MSCI returns are net returns. Sources: MSCI; World Federation of Exchanges; Valverde

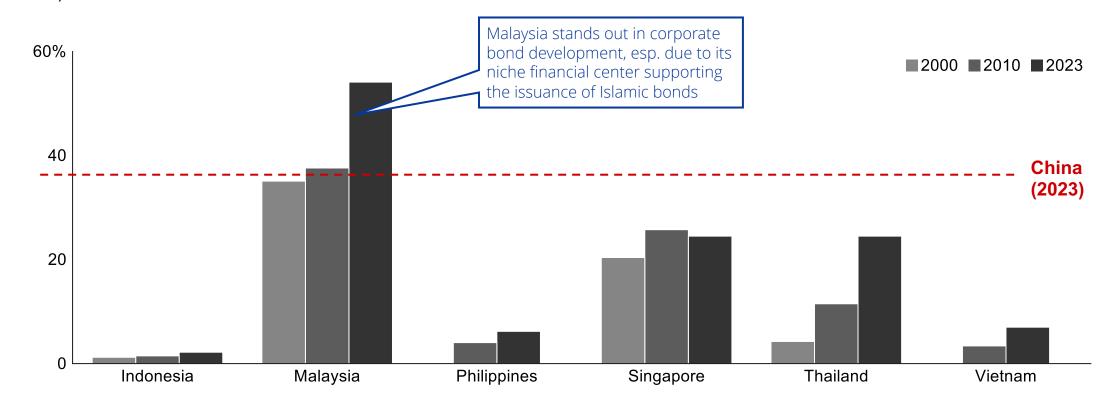
SEA-6

(USD B)



Some vibrancy in bonds, especially in Thailand and Malaysia, but still a minor part of global corporate bond market

Corporate bond market capitalization to GDP ratio (2000–23)



Sources: CEIC, DBS; Capital IQ; Bloomberg



To further deepen capital market, several actions need to be taken by governments, investors, and business owners

GOVERNMENTS

- **Streamline regulations** to foster competition and innovation in the financial sector
- Increase support for SME financing through government-backed loan guarantee programs and funding for VC & PE investments in SMEs
- Improve financial inclusion by supporting microfinance initiatives and promoting the use of digital banking technology
- Promote sustainable finance initiatives, such as green bonds and ESG investing
- Launch financial education programs to improve household financial literacy
- Introduce mutual funds and ETFs catering to various investor needs and risk profiles
- Provide tax incentives to encourage retail investors' participation in markets
- Promote good corporate governance **practices** among listed companies
- Implement investor protection measures to safeguard retail investor interests

INVESTORS

- Participate in financial education programs to enhance investor awareness and understanding of capital market dynamics and associated risks
- **Utilize fintech platforms** to improve the efficiency of trading and investment decisionmaking
- **Incorporate ESG factors into investment** decisions, supporting companies with sustainable business practices
- Comply with regulatory requirements and standards established by relevant authorities
- Conduct comprehensive due diligence on investment opportunities

BUSINESSES

- **Expand financial services** to underserved populations, including SMEs and low-income households
- Invest in technology and innovation to enhance operational efficiency and improve financial access for underserved populations
- Integrate sustainable finance principles and ESG considerations into business strategies
- **Launch financial education campaigns** to improve financial literacy
- Offer financial products customized to meet investor needs and risk profiles
- · Comply with regulatory requirements and standards established by relevant authorities
- Strengthen corporate governance practices to bolster investor trust and confidence

BAIN & COMPANY (4)





Accelerate Green Transition

Southeast Asia is well-endowed with natural resources and green potential









~20%

of the world's known plant and animal species are found in SEA



>30,000 GW

Total solar power potential in Southeast Asia



~50%

of global nickel production is in Indonesia and the Philippines



210 M Ha

Total area of forests in Southeast Asia



>1,300 GW

Total wind power potential in Southeast Asia



~35%

of global tin production is in Southeast Asia



30%

SEA's potential contribution to the world's carbon offset supply



>200 GW

Total hydro power potential in Southeast Asia



~22%

of global bauxite reserves are in Southeast Asia

Sources: International Energy Association; Lit. search

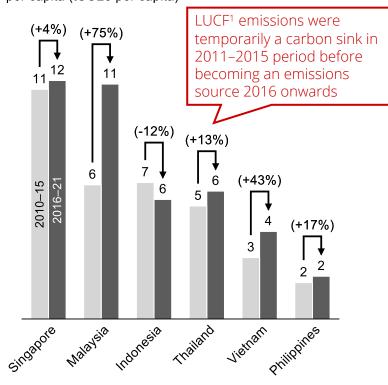


Accelerate Green Transition

Southeast Asia is not fully embracing green transition yet, with rising greenhouse gas emissions

Singapore and Malaysia have high greenhouse gas (GHG) emissions

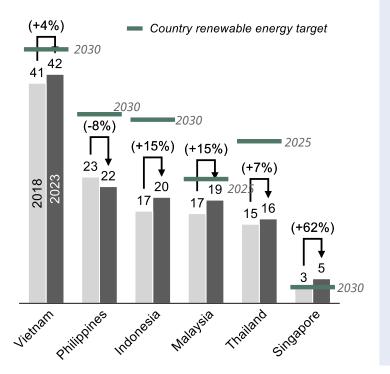
Five-year average greenhouse gas emission per capita (tCO2e per capita)



Note: (1) Land use change and forestry Sources: Climate Watch; World Bank; IRENA

Slight rise in renewable energy share across the region; Vietnam ahead of others

Renewable energy share of electricity generation (percentage)



- There is lagging progress on green transition in the region, highlighting a need for capital and commitment
- Singapore and Malaysia have the highest per capita GHG emissions in the region; key drivers include Singapore's energyintensive industries and port activities and Malaysia's focus on manufacturing and palm oil production
- Emissions per capita are increasing, especially in Malaysia and Vietnam; this is attributed to their economic growth, increased coal-based power generation in Vietnam, and expansion in energy-intensive sectors in Malavsia
- The decline in renewable energy's share is due to factors such as subsidy cuts, fossil fuel affordability, and slow renewable tech uptake; ultimately, a lack of availability in renewable energy and storage could disadvantage SEA's attractiveness, incl. for data center development
- Policy changes and climate accords may catalyze a shift toward a faster sustainability transition



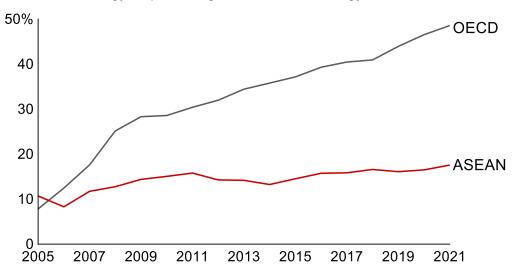


Accelerate Green Transition

ASEAN investment in renewables continues to underperform vs. global trends; change is needed to unlock green potential

Renewables FDI flows into the region have underperformed relative to OECD countries ...

Renewable energy as percentage of cumulative energy FDI flows



"From 2016–2020, for every dollar invested in renewable power capacity in Southeast asia, another dollar was invested in unabated fossil fuels, compared with US\$0.5 in Sub-Saharan Africa, US\$0.3 in China and US\$0.2 in Latin America."

Southeast Asia Energy Outlook 2022, International Energy Agency

... driven by market and regulatory conditions, as well as costs of capital impacting returns

Project investment risks

Higher costs of capital

The cost of capital for renewable energy investments remains relatively high in many SEA countries, e.g., 10%-12% in Vietnam, and the financial value proposition for private sector investment in renewables remains unclear vs. advanced economies

Higher perceived risks lower project bankability

Private capital has accounted for only 60% of renewable power investment in Southeast Asia, compared to about 90% in advanced economies, due to ongoing perceived currency fluctuation and regulatory risks

Emerging market risks

Higher offtake risk

In many SEA countries, electricity is heavily regulated, often subsidized to the consumers, and requires a **state-owned utility** enterprise to be the sole offtaker; uncertainty about ability and timing of grid upgrades to support

Lack of policy continuity

Supportive policy incentives in SEA countries like Vietnam have spurred a significant solar and wind buildout, especially over the past five years, but the process has been characterized by constant changes to deployment and grid regulations, and uncertainty about tariff structure to support

BAIN & COMPANY (4)

Sources: IEA 2022 Energy Outlook - ASEAN Renewables: Opportunities and Challenges (IEA): Bain / GenZero / Standard Chartered / Temasek SEA Green Economy Report 2024





Accelerate Green Transition:

More needs to be done to accelerate investments

Accelerators required to unlock full potential

- Policies and incentives to further push transition and green investments
- Innovative finance mechanisms to facilitate more capital flow
- Scaling corporate investment to establish future-ready businesses
- Cluster/pilot developments to scale technological development
- Regional collaboration to drive coordinated Southeast Asia strategy



Embrace Multilateral Initiatives

To spur growth, ASEAN will need to improve coordination of various regional transformation efforts

ECONOMIC INTEGRATION

Ensure free movement of people, capital, and goods in the region

- Ensure ASEAN/RCEP can ease movement of talent to strengthen growing sectors according to each country's needs
- Ensure that RCEP's full potential is realized
 - Enhance regulatory alignment: Align standards and regulations among RCEP member states to facilitate smoother trade
 - Strengthen digital trade policies: Draft policies bolstering digital trade to fully leverage RCEP's framework

INNOVATION & DIGITAL

Harmonize digital landscape to boost cross-border trade and innovation

- Harmonize regional digital market regulations under Digital Economy Framework Agreement (DEFA)
 - **Common framework:** Utilize DEFA to develop a common digital regulatory framework, streamlining digital markets and creating a unified policy landscape
 - **Consumer protection:** Standardize consumer protection laws to build trust in cross-border ecommerce
- Coordinate the development of an interoperable digital payment system
 - **Cross-border payment integration:** Link national payment systems across ASEAN to allow real-time, cost-effective transactions
 - **Inclusive financial services:** Leverage mobile technologies to broaden access, cater to underbanked/unbanked

ENVIRONMENTAL & SOCIAL

Drive adoption of green practices to ensure economic growth and resilience

- Expedite the development of the ASEAN Power Grid (APG)
 - Renewable energy integration: Prioritize the integration of renewables, reducing dependence on fossil fuels
 - **Cost and energy efficiency:** Leverage the grid to prevent redundant capacity build-up, achieving economic and energy efficiency
- Develop a robust regional carbon market
 - Set emission caps and standards: Establish region-wide carbon emission caps and standards
 - **Regional carbon credit:** Create a shared carbon credit system to promote emissions reduction regionally
 - Integrate with global markets: Connect ASEAN's carbon market with global markets

BAIN & COMPANY (4)

Source: Bain analysis, Lit. search





Embrace Multilateral Initiatives – RCEP

Regional Comprehensive Economic Partnership (RCEP) should boost further economic integration within Asia

Overview

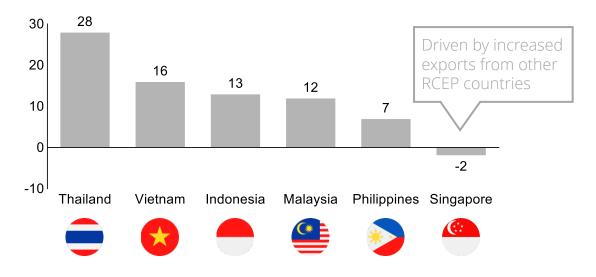
- Largest trade bloc in the world, signed in 2020 by 15 countries accounting for ~2.2 billion consumers and 30% of global GDP
 - First trade agreement between China, South Korea, and Japan
- **Comprehensive trade agreement**, aimed at phasing out up to 90% tariffs on imports by ~2030, streamlining customs procedures, and establishing unified trade standards to boost regional trade and economic integration

15 member South Korea countries China of RCEP Thailand Vietnam Cambodia Myanmar -Australia Singapore New 7ealand

Key expected outcomes

- RCEP can add up to USD 500 billion to world trade by 2030
- RCEP expected to increase GDP of trading bloc by 0.4% (USD 170 billion)
- Net impact on exports expected to be quite significant, esp. for Thailand

Expected net impact on exports by 2030 (USD billion)



Sources: Lit, search; ASEAN.org; ADB; UNCTAD







1993–2023 Southeast Asia Economic Outcomes

2024–2034 Southeast Asia GDP Forecast

Opportunities to Accelerate Growth

Deep Dive: Explaining 1993–2023 Economic Outcomes

Deep Dive: Additional Data for 1993–2003

Deep Dive: External Trends

Seven traditional growth drivers facilitate economic progress

GROWTH DRIVERS

Ease of doing **business**

> Simplify regulations to foster an environment that boosts investment. entrepreneurship, and risk-taking

Increase competition

> Competition is a prerequisite for higher investment, innovation, and efficiency

> If domestic sectors are overly consolidated, international competition is needed

Strengthen institutions

> Bolster public and private institutions for better governance, accountability, and support of sustainable growth

Improve workforce quality and availability

> Enhance workforce capabilities through education, health initiatives, and skills training

Embrace female participation, controlled immigration, and worker mobility

BAIN & COMPANY (4)

Build infrastructure

Broaden access to hard and soft infrastructure to improve connectivity and efficiency, and support economic development

Increase stability

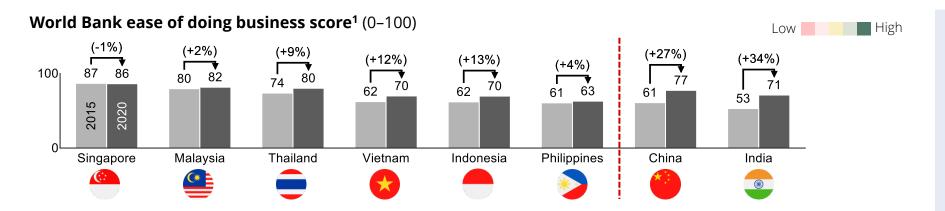
Promote political, economic, and policy stability for a reliable investment climate

Facilitate investment

> Create policies to attract investment, enhance economic diversification, and stimulate "good job" creation

> Domestic investment generally 10x+ foreign investment

Ease of Doing Business | Vietnam, Indonesia, and Thailand materially improved ease of doing business



Ease of doing business sco	Ease of doing business score contributors ²														
	Singapore 🥌		Malaysia 👙		Thailand =		Vietnar	n 🚼	Indone	esia 🛑	Philippines ≽				
	2015	15 2020 2015 2020		2015	2020	2015	2020	2015	2020	2015	2020				
Starting a business	96	98	89	83	83	92	79	85	64	81	67	71			
Dealing with construction permit	81	88	82	90	71	77	79	79	64	67	65	70			
Getting credit	75	75	70	75	45	70	65	80	50	70	35	40			
Trading across borders	89	90	84	88	84	85	66	71	63	68	71	68			
Enforcing contracts	89	85	69	68	69	68	66	62	44	49	49	46			
Resolving insolvency	74	74	62	67	72	77	33	38	68	68	55	55			

Notes: (1) Ease of doing business score rates business regulations and their enforcement from 0–100 (higher means better regulations and stronger protections for businesses); the World Bank conducted changes to the rank and score calculation methodology for the index after an internal audit in 2020 to ensure consistency and comparability of scores across countries and between years; the changes resulted in revision of previously published scores; (2) The ease of doing business score is then broken down into different sub-categories/sub-scores; the list of sub-categories presented above is non-exhaustive | Source: World Bank

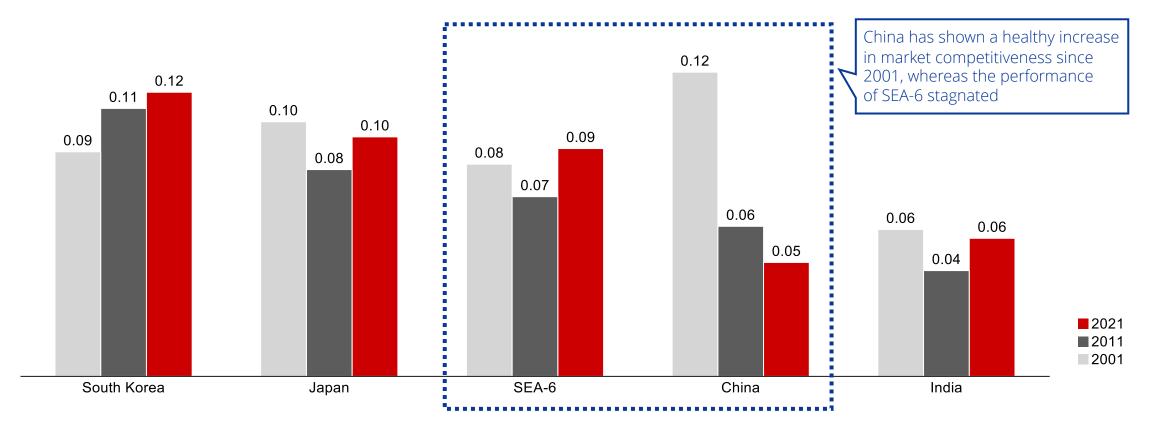
- In general, we see positive trends across the countries with Vietnam and Indonesia experiencing significant improvements
 - Indonesia and Vietnam in particular have achieved significant improvements in areas such as "Getting credit" and "Starting a business"
 - The improvements in both country were driven by government efforts to drive policy reforms, e.g., the Online Single Submission (OSS) system for new business registration in Indonesia and the Vietnamese government's support for SMEs
- However, there is still room for improvement; areas such as "Enforcing contracts" and "Resolving insolvency" remain common areas of improvement across the countries



Increase Competition | SEA-6 countries have less competitive markets than China or India

Hirschman-Herfindahl (HH) market concentration index

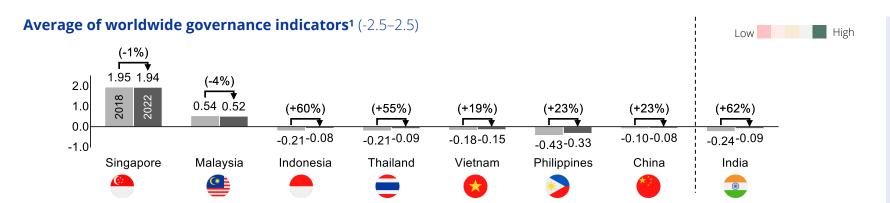
(2001, 2011, 2021; lower = more competitive)



Notes: HH index computed by squaring each company's market share and summing them up respectively; A figure of 1.0 represents full market concentration/monopoly. Sources: World Bank; UNCTAD; UNSD; WTO



Strengthen Institutions | Indonesia, Thailand and Vietnam saw substantial improvements across governance indicators; Singapore ahead of the other countries



Worldwide governance score contributors

	Singapo	ore 🥌	Malays	ia 👙	Indone	sia 🛑	Thailan	d 🚍	Vietnar	n 🚼	Philippi	ines ≽
	2018	2022	2018	2022	2018	2022	2018	2022	2018	2022	2018	2022
Political stability and absence of terrorism	1.47	1.46	0.25	0.14	-0.55	-0.44	-0.80	-0.38	0.03	-0.03	-1.10	-0.71
Government effectiveness	2.23	2.14	1.05	0.99	0.14	0.44	0.25	0.13	-0.01	0.18	0.06	0.06
Regulatory quality	2.12	2.21	0.58	0.64	-0.02	0.21	-0.04	0.17	-0.37	-0.43	0.03	0.06
Rule of law	1.80	1.78	0.53	0.56	-0.31	-0.19	0.00	0.07	-0.04	-0.16	-0.56	-0.52
Control of corruption	2.13	2.09	0.30	0.25	-0.30	-0.43	-0.46	-0.45	-0.51	-0.29	-0.58	-0.54

Notes: Governance indicators include five dimensions (excluding Voice and Accountability), scaled from -2.5 to 2.5 (higher values equal better governance) that summarize quality of governance across countries; we excluded Voice and Accountability metric in average calculation as we deem it irrelevant for markets in review | Source: World Bank

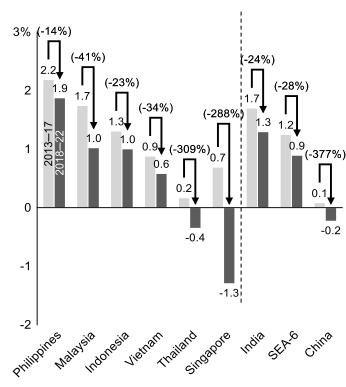
- SEA displays a general uptrend in governance, with each country showing a commitment to reform and improvement; Singapore is ahead of the other countries in all governance indicators
- Indonesia's governance indicators show substantial improvement, notably in government effectiveness and regulatory quality
- Thailand's scores in political stability and the rule of law have risen, with efforts like the National Anti-Corruption Strategy potentially influencing these areas



Improve Workforce Quality and Availability | Working population growth rates slow down with decline in Singapore and Thailand; immigration slowed down in Singapore and Malaysia

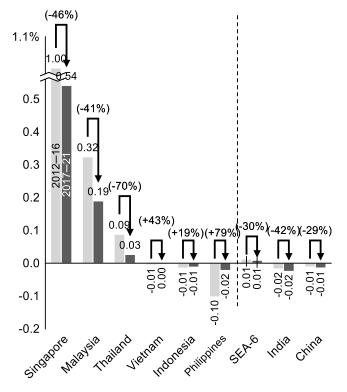
Slower working population growth in Southeast, with declines in Singapore & **Thailand**

Working population growth (2013-22, CAGR)



Singapore and Malaysia have highest immigration, while Indonesia and Philippines have largest emigration

Five-year average net migration as percentage of total population¹ (2012–21, %)



Notes: Net migration rate is calculated with the following formula: (total immigration – total emigration) / total population; positive number means more people immigrated to the country whereas negative figures mean that more people emigrated from the country | Sources: Euromonitor; World Bank

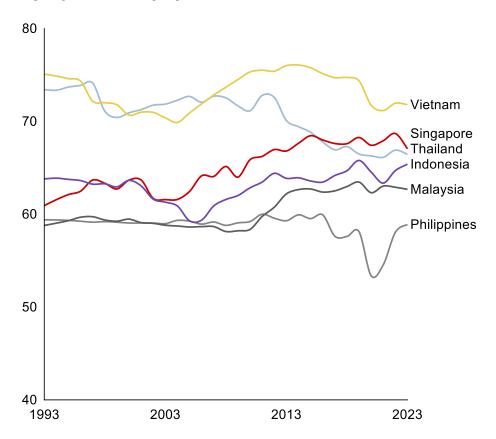
- Working population growth is decelerating in Southeast Asia as the economies mature
- The Philippines leads with the strongest working population increase, whereas Singapore and Thailand experience declines caused by low birth rate and aging population
- · Immigration rates in Singapore and Malaysia have dropped due to targeted immigration policies and changing economic conditions that have impacted the flow of labor
- Indonesia and the Philippines traditionally export labor but recently, emigration rates from these countries are slowing down driven by improvements in local job markets and governmental efforts to bolster domestic employment decreasing the reliance on overseas work



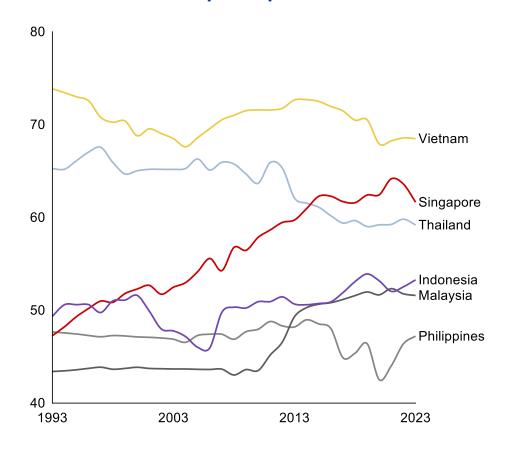


Improve Workforce Quality and Availability | Increasing employment-topopulation, female labor force participation is key to developing workforce; Vietnam, Singapore, Thailand are leading in Southeast Asia

Employment to population ratio (%)



Female labor force participation ratio (%)



Note: Employment to population ratio and female labor force participation is based on population over 15 years of age Source: World Bank

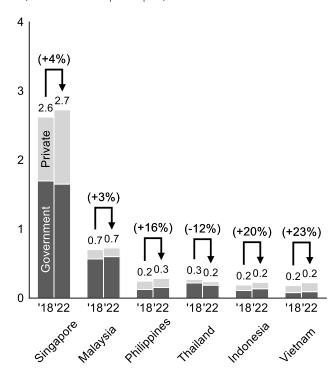




Improve Workforce Quality and Availability | Education spending is up but below required levels; healthcare expenditures increased, partially driven by COVID -19

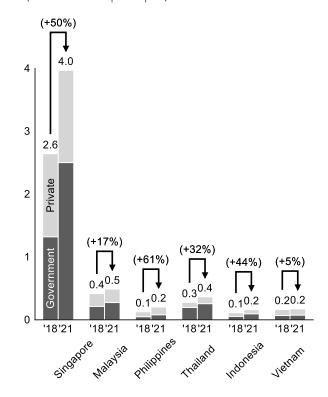
ID, PH, and VN saw increase in education spend; SG ahead of others

Total private and government education spending per capita (USD thousand per capita)



ID, PH, SG, and TH saw increases in healthcare spend, driven by govt spending

Total private and government healthcare spending per capita (USD thousand per capita)



- SEA-6 has shown generally positive trends for education spending with Indonesia, Vietnam, and Philippines witnessing a sizeable increase in per capita spending on education; however, they still lag significantly behind their regional counterparts
- Governments in the region have faced multiple pressing issues, including healthcare, infrastructure development, and economic recovery; despite these challenges, education budgets have seen steady allocations, reflecting a commitment to maintain a balance among various sectors.
- Government spending in healthcare increased significantly in Singapore, Philippines, Indonesia, partially driven by the Covid-19 pandemic

Sources: Euromonitor: World Bank: OECD



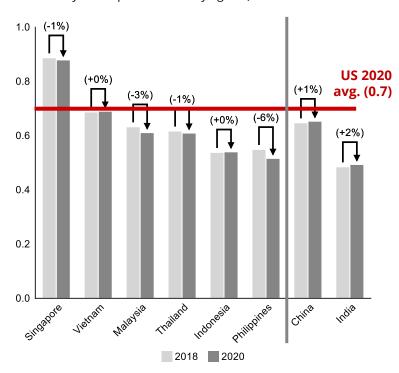


Improve Workforce Quality and Availability | Singapore and Vietnam lead in Human Capital Index and PISA scores; Covid-19 negatively impacted learning outcomes

SEA countries have varying HCI scores, Vietnam and Malaysia comparable to China

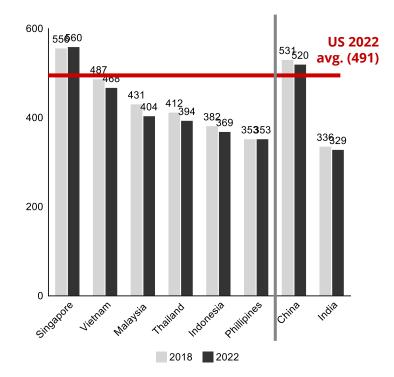
Human Capital Index (HCI) Score

(Measure of human capital that a child born today can expect to attain by age 18)



SEA countries experienced slight decline in average PISA score vs. 2018

Average PISA scores in reading, math, science



- Singapore and Vietnam lead on Human Capital index scores, particularly in education (higher test scores, higher learning-adjusted years of school)
- Singapore also has significantly better health outcomes than its peers, with better adult survival rate; apart from Singapore and Thailand, 20%–30% of children under 5 years old are stunted
- While all countries have between 12 and 14 expected years of schooling, learning-adjusted years of schooling vary significantly between countries; Singapore and Vietnam remain ahead with >10 years, but the Philippines and Indonesia drop significantly with <8 years
- Despite promising trends in education investment, standardized test scores, such as PISA, showed a slight decline across most of these countries, partly driven by the Covid-19 pandemic, which disrupted learning and teaching methods

Sources: Euromonitor; World Bank; DBS





Build Infrastructure | Indonesia, the Philippines and Vietnam have underinvested in infrastructure; we believe 6+% is the appropriate spend level for developing markets; 4%-5% for developed

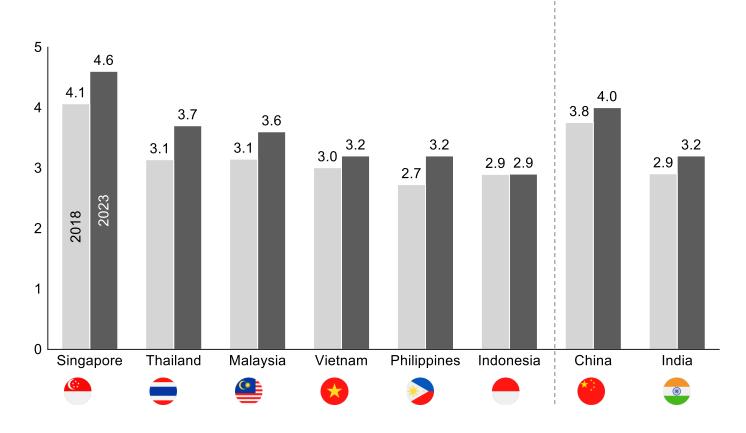
	Average public infrastructure investment as percentage of GDP	1993 - 2003	Overspending Under2003 - 13	rspending Within target range 2013 - 19
10	Indonesia	4%	3%	3%
untries	Thailand	8%	5%	5%
sia Cou	Philippines	3%	2%	3%
Southeast Asia Countries	Malaysia	10%	10%	8%
South	Vietnam	3%	5%	5%
	Singapore	6%	4%	5%
ark es	China	20%	17%	16%
Benchmark Countries	Japan	9%	6%	5%
Be	(•) South Korea	6%	5%	4%

Sources: World Bank; International Monetary Fund



Build Infrastructure Over the last five years, most Southeast Asian countries saw improvements in infrastructure quality, except Indonesia

Infrastructure score, Logistics Performance Index by World Bank¹ (2018–23, 0–5 score)



Notes: (1) The Logistics Performance Index (LPI) is a global benchmarking tool developed by the World Bank that assesses the efficiency and quality of a country's infrastructure and logistics services. It considers factors such as the ease of trade, infrastructure development, and the overall logistics environment. A higher LPI score indicates better infrastructure and logistics performance, contributing to a country's competitiveness in global trade. Sources: World Bank; International Monetary Fund

- SEA countries, in particular Singapore,
 Thailand, Malaysia, and the Philippine, saw improvements in their infrastructure
 quality and have made investments in public infrastructure over the years. Major infrastructure project in the region include:
 - Singapore: The Tuas Mega Port project, which solidifies Singapore's position as a global trade and logistics hub
 - Thailand: The Eastern Economic Corridor (EEC) project, which encompasses highspeed rail links, new airports, and deep-sea port expansions
 - Malaysia: The Pan Borneo Highway project, which connects the states of Sabah and Sarawak, improving regional connectivity
 - The Philippines: Renewable energy initiatives, including wind and solar farms, which contribute to a sustainable energy mix and increased access to electricity in remote areas
- In contrast, Indonesia's infrastructure score has remained stagnant, which can be attributed to challenges in infrastructure development, geographical complexity, funding constraints, and regulatory hurdles.

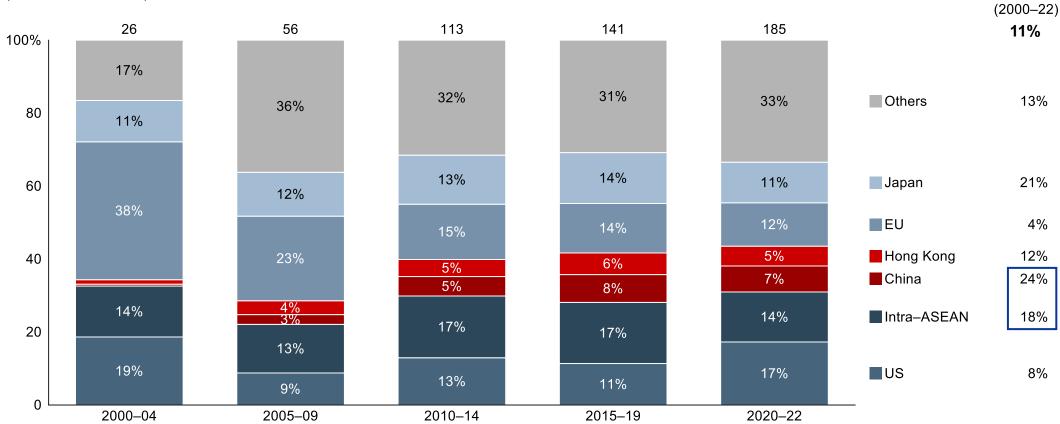




Facilitate Investments | The G7 have been significantly investing in Southeast Asia

FDI Inflows in ASEAN





Note: Average for each period

Sources: Euromonitor; ASEAN statistics; UNCTAD

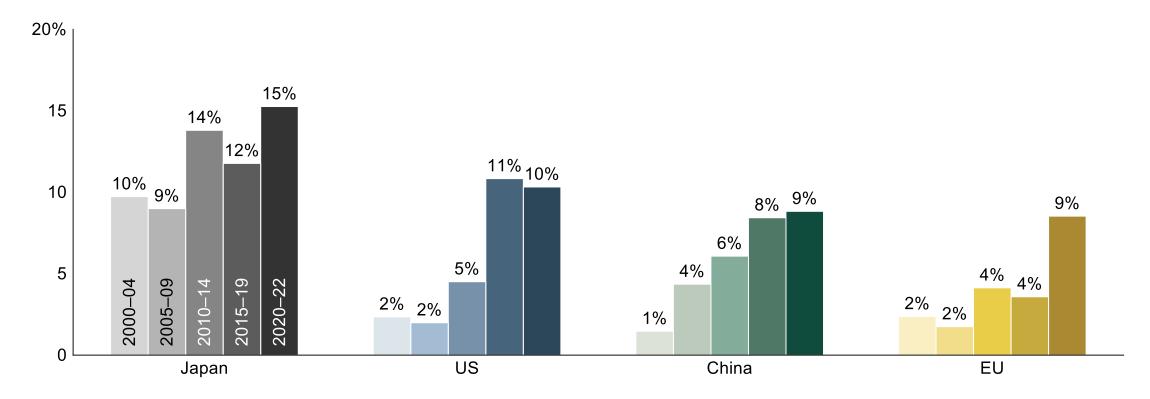


CAGR

Facilitate Investments | Japan commits highest share of FDI to ASEAN compared to peers; Chinese investments in ASEAN have continually increased since 2000

ASEAN FDI as percentage of each region's outwards FDI flows

(2000-22, %)



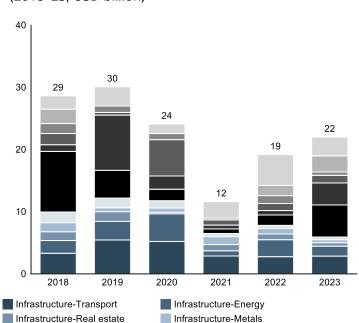
Note: China includes Hong Kong and Macau, EU refers to EU-28 (including the UK) Sources: Euromonitor; ASEAN statistics; UNCTAD



Facilitate Investments | Chinese FDI (investment and construction) are continuing in SEA-6, especially in infrastructure and green transition industries

China has been active in investments and construction into SEA

Chinese FDI into Southeast Asia (2018-23, USD billion)



Non-infrastructure investments-

Examples of recent non-infrastructure FDI



Tiktok Acquisition of Tokopedia (USD 840M)

TikTok acquired 75% of local e-commerce Tokopedia to gain access into the domestic etokopedia commerce space



Bahodopi Nickel Processing Project (USD 2.1B investment)





Shandong Xinhai, Baowu Steel, and Vale collaborating to build nickel processing facilities in Morowali to **BAOWU** produce ferronickel with up to 80,000 tons of nickel

Examples of recent infrastructure FDI



East Coast Rail Link (USD 12B investment)

Railway on east coast of peninsular Malaysia; currently under delays as governments have changed



Jakarta-Bandung High Speed Rail (USD 4.5B loan investment)

142 km high speed rail completed in 2023 between cities of Jakarta and Bandung

- Chinese investments have recovered in Southeast Asia, with Indonesia taking around USD 7.3B worth in investments in 2023, focused on FV value chain
- Despite a USD 50B gap in Belt & **Road Initiative commitments** on China's projects (2015–21), China is still the largest infrastructure investor in the region, spending USD ~30B in 2015-21
- Belt & Road Initiative construction progress has slowed down since the pandemic. However, Indonesia, Malaysia and Singapore still see strong investments

BAIN & COMPANY (4)

Note: FDI figures above from the American Enterprise Institute Sources: ASEAN Stats; Lowy Report; Griffith University Report; American Enterprise Institute; Lit. search

Non-infrastructure investments-Transport

Non-infrastructure investments-Energy





Infrastructure-Others

-Metals

Others

Non-infrastructure investments

Non-infrastructure investments-

1993–2023 Southeast Asia Economic Outcomes

2024–2034 Southeast Asia GDP Forecast

Opportunities to Accelerate Growth

Deep Dive: Explaining 1993–2023 Economic Outcomes

Deep Dive: Additional Data for 1993–2003

Deep Dive: External Trends

Key statistics across countries

				SEA	A-6			OTHER APAC OTHER PARTS OF WORLD)		
2023 FIGURES	UNIT	INDONESI A	THAILAND	SINGA- PORE	PHILIP- PINES	VIETNAM	MALAYSIA	CHINA	INDIA	JAPAN	SOUTH KOREA	US	GERMAN Y	UK	FRANCE	BRAZIL	MEXICO	TURKEY
GDP	USD B	1,371	515	501	437	420	400	17,795	3,572	4,213	1,713	27,361	4,462	3,340	3,030	2,173	1,790	1,104
Real GDP growth	%	5.0%	1.9%	1.1%	5.7%	4.9%	3.7%	5.3%	6.9%	1.9%	1.4%	2.5%	-0.2%	0.1%	0.7%	2.9%	3.2%	4.5%
GDP per capita	USD K per pax	4.9	7.2	87.9	3.7	4.2	12.0	12.6	2.5	33.8	33.2	81.7	52.9	49.3	46.0	10.3	13.9	12.9
Total population	М	278	72	6	117	99	33	1,412	1,429	125	52	335	84	68	66	211	128	85
Unemployment rate	%	5.3%	1.0%	1.9%	4.8%	2.3%	3.4%	5.3%	8.1%	2.6%	2.7%	3.6%	3.0%	4.0%	7.3%	8.0%	2.8%	9.4%
Population living In poverty ¹	%	9%	5%	19%	16%	3%	0%	14%	9%	15%	10%	11%	14%	21%	16%	27%	43%	13%
Inflation	%	3.7%	1.2%	4.8%	6.0%	3.3%	2.5%	0.2%	5.7%	3.3%	3.6%	4.1%	6%	7%	5%	4.6%	5.5%	54%
Current account balance as % of GDP	%	-0.1%	1.3%	19.8%	-2.9%	7.1%	1.3%	1.4%	-0.9%	3.6%	2.1%	-3.0%	5.9%	-3.3%	-0.7%	-1.4%	-0.3%	-4.1%
Public debt as % of GDP	%	40%	62%	164%	57%	35%	70%	83%	83%	252%	55%	122%	64%	101%	111%	85%	53%	29%
Manufacturing as a % of GVA	%	21%	27%	21%	18%	23%	26%	27%	16%	19%	27%	11%	21%	10%	10%	14%	23%	25%
FDI inflows*	USD B	22	10	141	9	18	17	189	49	33	18	285	11	14	36	86	35	NA
% share* of world manufactured exports	%	0.8%	1.3%	2.4%	0.4%	2.0%	1.5%	21.2%	1.8%	4.0%	3.7%	7.6%	8.9%	2.0%	2.9%	0.5%	2.8%	NA

Notes: (1) Defined as living below national poverty line for each country; (*) 2022 data | Sources: Euromonitor; WTO; Lit. search





Real GDP | Size and growth of GDP

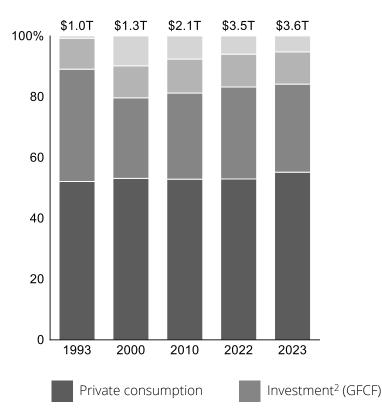
			RE	al gdp (l	JSD BILLIC	N)			REAL GDP CAGR (%)								
COUNTRY	1993	2003	2013	2019	2020	2021	2022	2023	1993- 2003	2003- 2013	2013- 2023	2019- 2020	2020- 2021	2021- 2022	2022- 2023		
Indonesia	380	520	909	1,221	1,195	1,240	1,306	1,371	3%	6%	4%	-2%	4%	5%	5%		
Thailand	205	293	433	517	486	493	505	515	4%	4%	2%	-6%	2%	2%	2%		
Singapore	116	196	373	453	435	478	496	501	5%	7%	3%	-4%	10%	4%	1%		
Philippines	111	163	275	402	363	384	413	437	4%	5%	5%	-10%	6%	8%	6%		
Malaysia	98	166	270	363	343	355	385	400	5%	5%	4%	-5%	3%	9%	4%		
Vietnam	48	99	234	351	361	380	400	420	7%	9%	6%	3%	5%	5%	5%		
SEA-6	959	1,436	2,494	3,306	3,184	3,329	3,505	3,643	4%	6%	4%	-4%	5%	5%	4%		

Notes: Real GDP calculated based on constant 2023 USD exchange rates; YoY exchange rates likely impacted GDP growth figures given volatility of foreign exchange across countries. Source: Euromonitor

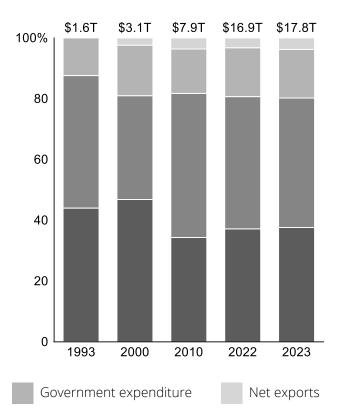


Real GDP | Compared to China, Southeast Asia GDP has been well-balanced between consumption, investments, and trade





China Real GDP¹ composition (percentage of GDP)



~4.9x

China's GDP vs. Southeast Asia's

~7.0x

China's investment levels vs. Southeast Asia's

~3.3x

China's private consumption vs. Southeast Asia's

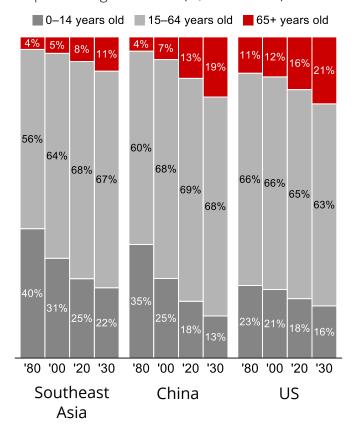
Notes: (1) Breakdown was calculated by taking various GDP components as a share of total GDP indexed to constant 2023 prices (based on 2023 USD fixed exchange rate); ASEAN-6 was aggregated by adding the USD values of each GDP component across the six economies; (2) Investments comprise gross fixed capital formation and increase in stocks (i.e., holdings of assets and liabilities). Source: Euromonitor



Demographic Shifts | The region is also seeing a growing aging population and shifts towards smaller households

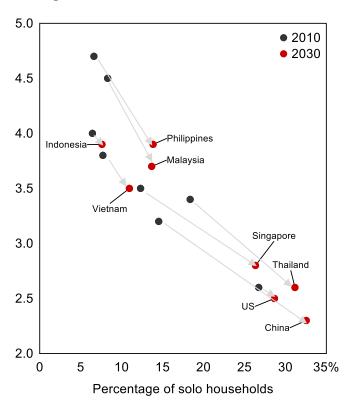
SEA has relatively low aging population, but following trend of China, US

Population age structure (%, 1980–2030)



SEA is also seeing increase in smaller and solo households

Average household size



Opportunities

- Emergent market niches and changing customer behavior: Demographic shifts open new niches, including:
 - Custom real estate: Rising demand for housing suited to individuals and small families, such as modular and compact designs
 - Health and wellness: Growth in bespoke health services and wellness products for aging individuals and those living alone
 - Solo lifestyle services: Rise in tailored products like single-serving meals and solo-focused entertainment

Challenges

- Market fragmentation: Catering to a fragmented market of single or smaller households requires a portfolio of diverse products and specialized marketing approaches
- Logistics adaptation: The preference for smaller, more frequent purchases necessitates agile logistics, innovative packaging, and efficient inventory management
- Financial services innovation: Financial sectors, particularly fintech, must align with the transaction behaviors of customers who favor microtransactions and digital services

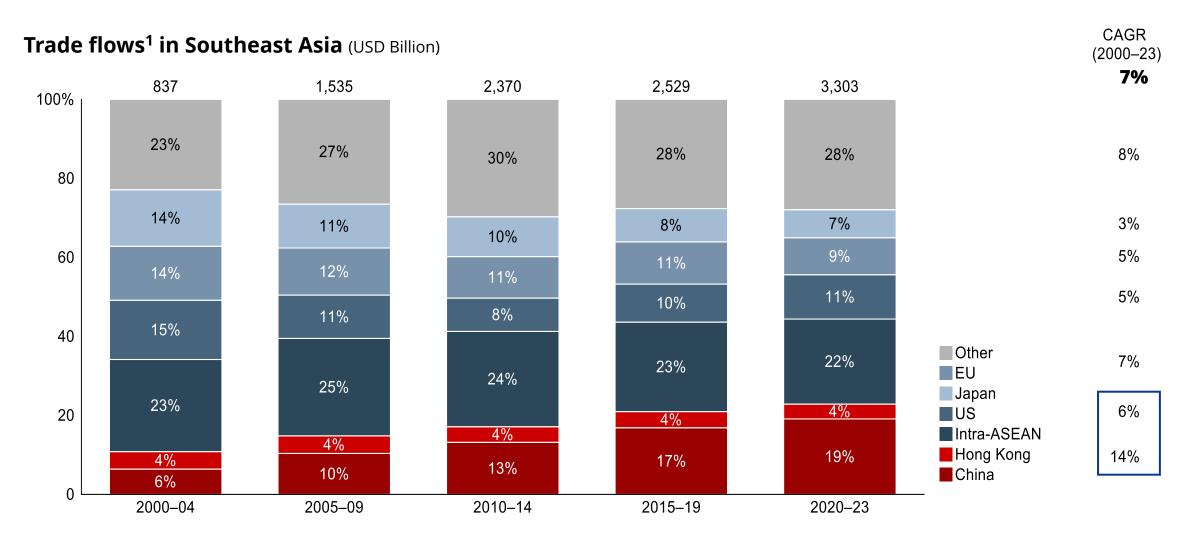
BAIN & COMPANY (4)

Sources: Euromonitor; Southeast Asia's Digital Consumers Report 2023 (Bain & Company, Meta, and DSG Capital)





Trade Flows | China has emerged as the largest and fastestgrowing external trading partner with Southeast Asia



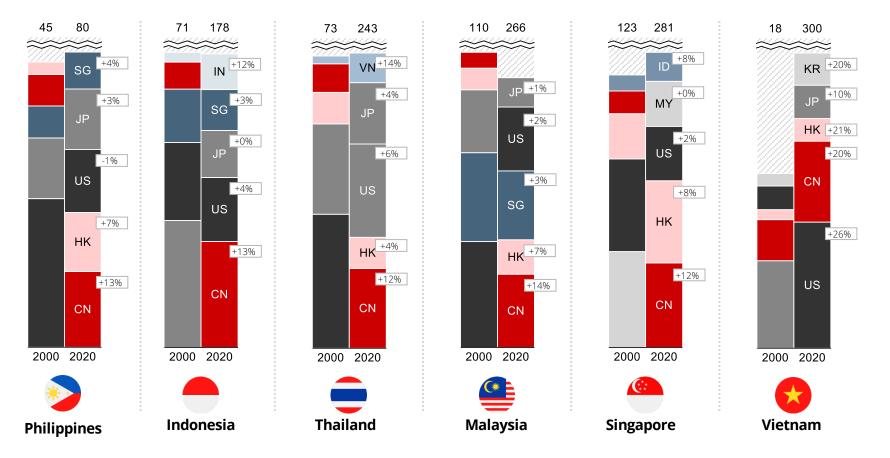
Notes: (1) Trade flows are defined as the sum of exports and imports; EU refers to EU-28 (incl. UK). Source: Euromonitor





Trade Flows | Southeast Asia exports to China have been growing more than 10% as China overtakes US as the main export destination for Southeast Asian countries

Southeast Asia Total Export Value (USD Billion)



Other Countries

Key:

SG: Singapore

HK: Hong Kong

JP: Japan

US: United States

CN: China

ID: Indonesia

IN: India

MY: Malaysia

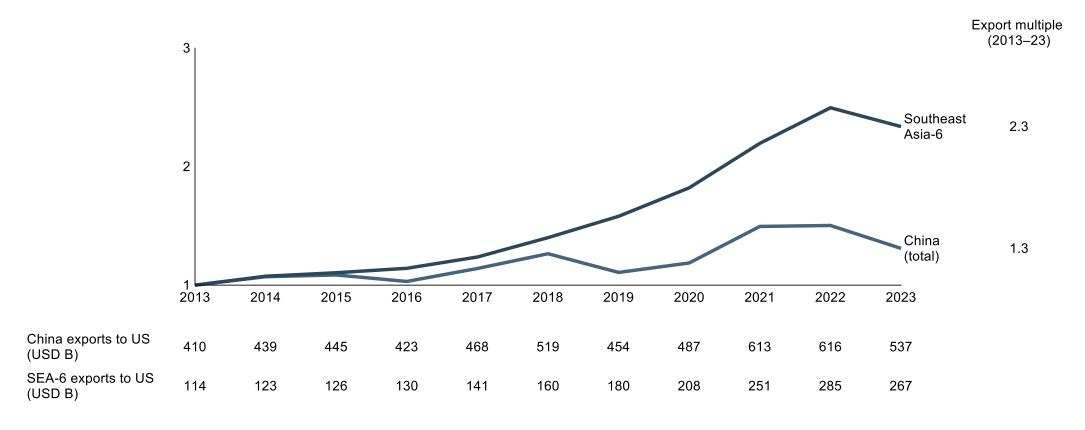
KR: Korea

VN: Vietnam

Source: Observatory of Economic Complexity

Trade Flows | SEA-6 exports to the US have increased 2.3x since 2013, while China's export growth to the US is relatively slower

Value of Exports to the US (2013–23, Indexed to 2013 Export Figures)

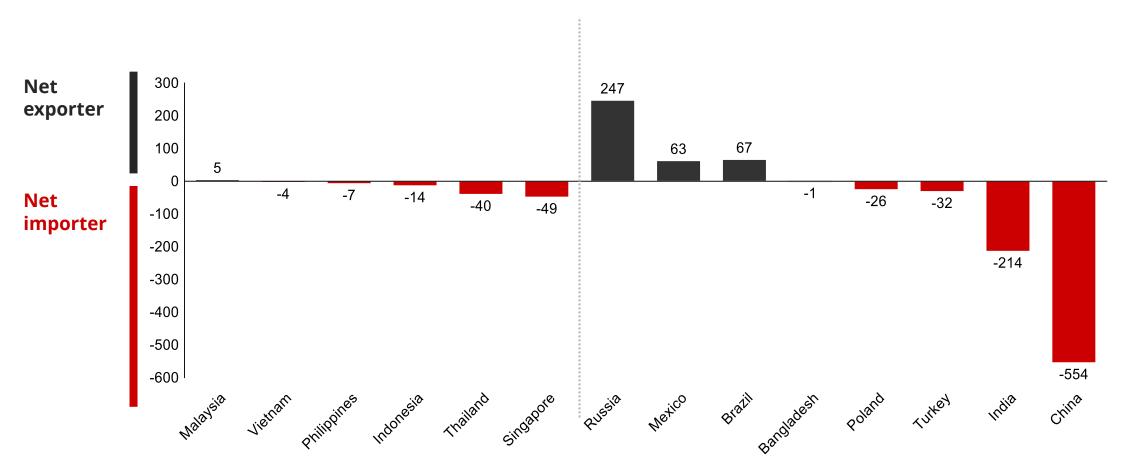


Notes: China includes Hong Kong and Macau; exports are FOB values; Southeast Asia-6 includes Indonesia, Malaysia, Singapore, Vietnam, Thailand, and the Philippines Source: Euromonitor



Trade Flows | Thailand and Singapore are the major energy importers

Net Import Position of Crude Oil and Natural Gas (Millions of Tons of Oil Equivalent)

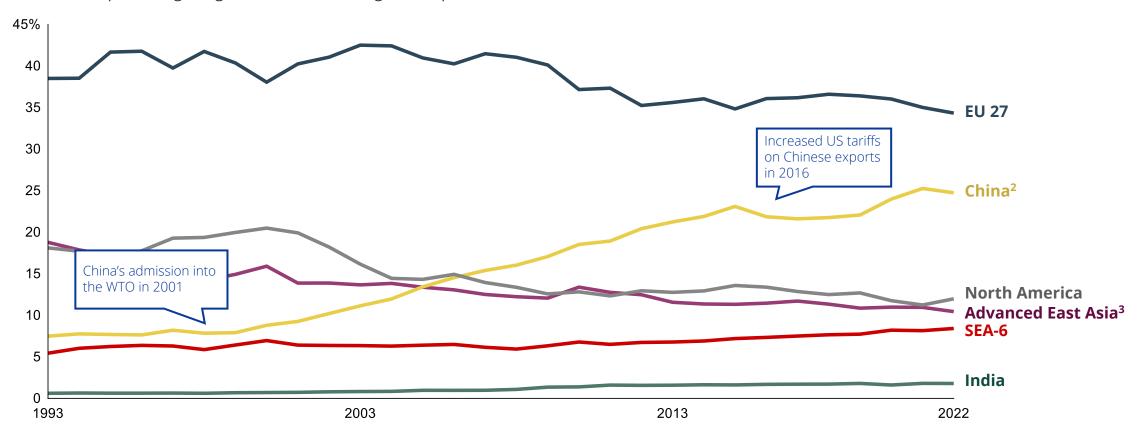


Source: Euromonitor

Manufactured Export Growth | Southeast Asia's share of global manufactured goods exports have grown modestly to ~8%, but still lag China's scale

Country/region share of global manufactured goods exports¹

(1993–2022, percentage of global manufactured goods exports)



Notes: Data for manufactured goods only available up to 2022; (1) Does not include agriculture or fuel and mining products; (2) Includes Hong Kong; (3) Includes South Korea, Japan, and Taiwan. Source: WTO



Foreign Reserves | Except Vietnam (which is improving), Southeast Asian countries maintain healthy government reserves

Average Foreign Reserves in USD Billion (Number of Months of Imports)

COUNTRY	2011-15	2016-19	2020	2021
Thailand	159.7 (7.1)	192.5 (8.4)	246.0 (12.1)	224.8 (9.0)
Philippines	69.5 (10.9)	66.2 (7.8)	84.4 (12.3)	81.4 (9.6)
Indonesia	101.4 (5.8)	117.5 (6.6)	131.2 (8.4)	139.3 (6.8)
Malaysia	112.4 (6.3)	94.1 (5.3)	99.7 (6.3)	99.7 (5.3)
Singapore	252.2 (5.3)	270.1 (5.2)	358.9 (6.6)	407.8 (6.5)
Vietnam	25.1 (2.1)	54.5 (2.6)	94.4 (4.0)	107.4 (3.7)
China	3497.5 (18.9)	3082.8 (14.8)	3216.5 (14.7)	3250.2 (11.7)
Brazil	351.6 (12.1)	353.4 (14.3)	332 (14.9)	309.4 (11.5)
Russia	413.9 (10.9)	374.8 (13.3)	457.0 (18.7)	497.6 (15.1)
India	283.2 (6.5)	378.7 (7.9)	541.6 (12.9)	569.9 (9.8)
Bangladesh	18.1 (4.8)	32.5 (6.5)	43.2 (8.7)	46.2 (6.3)
Turkey	96.2 (5.2)	80.4 (4.9)	48.5 (4.6)	64.8 (4.3)
Poland	92.1 (4.6)	110.9 (4.6)	138.5 (5.6)	145.2 (4.7)
Mexico	162.0 (4.6)	167.2 (4.2)	186.2 (5.2)	179.5 (4.2)

Note: Ranked based on 2016–19 foreign reserves by months of import (within Southeast Asia vs. others). Sources: Euromonitor; World Bank





1993–2023 Southeast Asia Economic Outcomes

2024–2034 Southeast Asia GDP Forecast

Opportunities to Accelerate Growth

Deep Dive: Explaining 1993–2023 Economic Outcomes

Deep Dive: Additional Data for 1993–2003

Deep Dive: External Trends

Our Assumptions about Southeast Asia Growth

1

Economic growth derives from four sources

- 1. More capital
- 2. More labor
- 3. More productive use of capital
- 4. More productive use of labor

3

China will remain a formidable competitor and innovator in most business segments. It is also the largest trading partner for all Southeast Asian countries. **SE Asian growth prospects are now linked to China's**

4

The long-term **globalization trend has plateaued**; however, **regionalization will offset** some negative effects

2

Southeast Asia is **too diverse to be approached as "one market".**Opportunities to cooperate and integrate are less important than domestic levers

5

Strong governance and institutions are required for above-average growth; many models work but clarity on rules and consistency in application are critical. There is no such thing as "good corruption"

6

Competition is required to spur innovation and productivity growth

- Tech-enabled disruption has breathed life into slow-growth services
- When local markets are small, international competition is necessary

7

The growth model of subsidizing state-protected large enterprises to drive export-led growth is no longer a viable model; there is over-capacity in every sector that lends itself to this approach

BAIN & COMPANY (4)

Geopolitical Landscape | There are several geopolitical levers that might affect Southeast Asia economy in the short-to-medium term

China's rising leadership

Rising Chinese influence due to rapid economic growth, stronger political influence, and growing leadership in innovation and global trade

US-China competition

Increased tension driven by economic competition and trade policies, competing geopolitical influence, and military tensions in the region

US presidential election

2024 US presidential election could potentially result in shifts in political, economic, and diplomatic stances between the US and SEA countries

Conflict and Wars

Major military conflicts such as the Russia-Ukraine and Middle East conflicts are affecting global geopolitics and the supply chain

Deglobalization and supply chain shifts

Marked shift from global integration to more regional and local systems, driven by trade tensions and the Covid-19 global pandemic

OPPORTUNITIES

- China's growth can lead to increasing trading activities and investment inflows between China and SFA countries
- Potential increased investments and opportunities to **diversify** exports and trade as the US and China vie for influence
- Chance to bolster security and economic alliances with the US
- Shift in global trade patterns could result in opportunities to capture new markets and increased investments
- Opportunity to capture shifts from traditional manufacturing hubs and modernize local industries

CHALLENGES

- Rising competitiveness of Chinese companies could challenge local businesses
- Risk of becoming too dependent on the Chinese market
- Risk of trade disruptions due to changing policies and sanctions
- Navigating geopolitical pressures and increased military tensions
- Risk of abrupt changes in US foreign policy that could affect existing agreements and alliances
- Possibility of new trade barriers or tariffs
- Risk of interruptions in **supply chains** resulting in potential surges in energy and commodity prices
- Potential global political and financial instability
- Increased costs and **complexities** due to rising protectionism, trade barriers, and supply chain shifts

Sources: Lit. search; Bain analysis





BAIN & COMPANY (4)

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China's Increasing Role | China will increase its share of FDI into Southeast Asia, with growth in both BRI and infrastructure spending and private sector offshoring

	TAILWINDS Positive trends cementing China's role in Southeast Asia	HEADWINDS Negative trends reducing China's role in Southeast Asia
Trade integration with Southeast Asia will increase	 China is largest/fastest-growing Southeast Asia trading partner Trade agreements, e.g., RCEP and ACFTA Dodging tariff and trade sanctions by G7 Need markets for excess production capacity Expanded commodities supply security 	 While some Chinese corporations need to offshore, local governments and Beijing are fearful of deindustrialization
Southeast Asia needs capital for infrastructure and green transition	 Infrastructure deficit in SEA requires FDI China has high savings it needs to deploy BRI shifting to smaller bets with higher probability of payback 	 BRI has a mixed reputation; experiences in Sri Lanka and Pakistan have impacted perceptions' Southeast Asia wants capital investment, not just cheap imports
Perception of China improving in Thailand, Malaysia, and Indonesia	 Shifting sentiments from US (to China) Perceived US weakness and poor dependability (2008 crisis, Trump/Biden protectionism, Trump policies towards allies) Support for Israel has further hurt US in Malaysia and Indonesia China has a significant diaspora in Southeast Asia 	 South China Sea dispute and past confrontations in the Philippines and Vietnam impair positive "mass sentiment" Governments have varying degrees of alignment with the US' cautionary outlook on Chinese surveillance



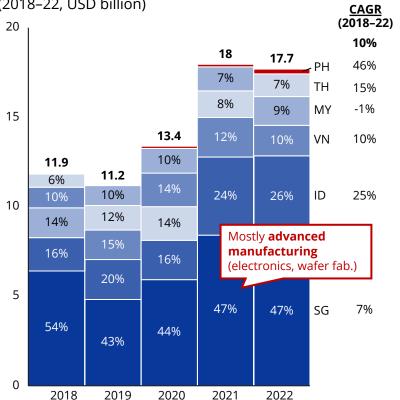
BAIN & COMPANY (4)

China's Increasing Role | Singapore and Indonesia with largest share of Chinese FDI; strong pipeline of investments committed from both public and private Chinese companies

NON-EXHAUSTIVE

From 2018–22, Chinese FDI to SEA-6 grew at a 10% CAGR

China's FDI outflows to SEA countries (2018–22, USD billion)



Note: (1) GNPG refers to China's General Nuclear Power Group Sources: UNCTAD; Company websites; Lit. search

Strong pipeline of Chinese investments into SEA-6 from public and private sector enterprises

INVESTMENT THEMES

Transportation and infrastructure	Shanghai Tunnel Eng. won a USD 454M contract to upgrade Changi Airport in Singapore (Oct '23)	Malaysia in talks with China to revive high-speed railway project connecting KL and SG (Mar '23)	
Advanced manufacturing expansion	BYD to invest USD 1.3B in Indonesia for its fifth overseas factory (Jan '24)	China's Chery Automobile and Changan Auto to set up Thailand EV assembly plan (Apr '24)	
Metals mining and processing	Huayou Cobalt in talks to invest USD 400M to expand nickel output in Indonesia (Jul '23)	CBL (CATL subs.) to invest USD 420M in Indonesia nickel mining & EV battery plant (Dec '23)	
Green energy transition	China GNPG ¹ among top investors for the USD 14B Philippines' renewable energy deal (Jan '23)	Xiamen H. to invest USD 900M in Vietnam energy storage systems and battery plants in (June '23)	
Advanced technology and R&D	China's Sunny Optical Group to invest USD 2.5B for its Vietnam advanced R&D hub (Mar '23)	Huawei signed multiple investments in Thailand's smart agriculture & Al computing center (Dec '23)	



China + 1 Impact | Foreign manufacturers have started expanding their operations from China to SEA due to rising costs and geopolitical uncertainties

Selected cases on foreign manufacturers expanding their operations outside of China into SEA¹

PLAYER	INDUSTRY	YEAR	MARKET	INVESTMENT OVERVIEW
Samsung	Electronics and smart devices	2008 to present	VN	 In 2019, Samsung completely shut down its phone factories in China; it has since invested USD 18B; Samsung VN generated >USD 70B revenue (2021), employing more than 100,000 people
Foxconn	Electric mobility	2023 (authorize d)	VN	 Foxconn to invest USD 250M in Vietnam for EV and telecom components (reaching USD ~3B total investment in Vietnam), adding >1,200 jobs
HP	Commercial laptops	2023	TH, VN	 HP aimed to diversify its laptop production; in 2023, it targeted ~10% laptop production outside of China
LG Innotek	Electronics	2023	VN	 LG Innotek invested a total USD 2B in Vietnam, including USD 1B in Haiphong plant
Adidas	Apparel and footwear	2010 to present	VN	 Since 2010, Adidas has gradually cut the share of footwear it makes in China in half, moving largely to Vietnam
GoerTek / Ju Teng / Nidec CCI	Contract manufacture rs ²	2024	Various	 GoerTek (major Chinese assembler of AirPods) will invest USD 280M in a plant in Vietnam to diversity supply chain away from China
				 Ju Teng International (Taiwanese 3C manufacturer with presence in China) invested USD 200M in electronic and automobile component factory in Vietnam
				 Nidec CCI (Taiwanese cooling module maker with operations in China) will invest USD 170M to establish site in Vietnam

Foreign manufacturers have started expanding their **production facilities beyond China to SEA** to:

- Minimize risk exposure to geopolitical instability or unexpected shocks (e.g., Covid-19 disruption in China resulted in prolonged facility lockdown, labor shortages, and slow deliveries)
- Take advantage of cost-effective and skilled labor as manufacturing costs in China have increased in the past few years
- Gain access to new, growing markets as intensifying competitions from local brands in China (e.g., Huawei, Xiaomi) have incentivized players to seek other market potentials
- Leverage attractive tax benefits as SEA countries are competing to draw foreign players relocating from China by offering various incentives

Notes: (1) Non-exhaustive; (2) Other examples include Yankey Engineering, Taiwan Union Tech, New Kinpo, Sunonwealth etc. Sources: Lit. search; Reuters; Nikkei Asia



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Political Landscape | Certain domestic political dynamics need to be considered with regards to their potential impact on near-term growth

COU	NTRY	KEY POLITICAL DYNAMICS		
	Indonesia	New administration's priorities	Joko Widodo accelerated infrastructure build, put his weight behind forced down-streaming in nickel, and managed the complex interests of a diverse and growing island nation; it remains to be seen if Prabowo continues with pro-growth priorities	
	Indonesia	Unpredictable policy landscape	Regulations in Indonesia are hard to predict and can change abruptly; recent regulatory direction has tended toward protecting the local market and producers.	
	Malaysia	Government and administration challenges	Prime Minister Anwar Ibrahim's government faces political cohesion and economic management challenges amid pro- Bumiputra opposition and coalition dynamics, influencing policy direction and economic growth	
		States charting growth pathways	States such as Johor, Penang and Sarawak are pursuing ambitious policies leveraging on their comparative advantage that could buffer against federal politics	
	Dhilinnings	Political landscape	Post-Duterte, the Philippines is undergoing positive political shifts, focusing on human rights, foreign policy, and economic reforms; pro-US stance invites clashing views on whether this will strengthen or weaken growth prospects	
	Philippines	Slow-moving bureaucracy	A slow-moving bureaucracy may get in the way of realizing much-needed policy shifts and improvement in basic growth drivers	
	Singanoro	Demographic pressures	Singapore faces challenges in talent and manpower availability, particularly in growth sectors, and may be limited in its policy maneuvers; efforts to increase foreign manpower have been unpopular	
Singa	Singapore	Changing regional dynamics	Shifts in political relationships, particularly between Singapore and Malaysia, could spur Singapore playing a more complementary role in the growth of the region	
	Thailand	Post-election government challenges	The new Thai government, post-2023 elections, is navigating a complex landscape with numerous elite stakeholders; managing these dynamics and addressing inequalities are critical for stability	
		Bureaucratic conservatism	Frequent political transitions and changes in government have likely contributed to a conservative approach among policymakers and civil servants, making them less likely to invest in difficult reforms for medium-term payoffs	
*	Vietnam	Communist party's balancing act	The Communist Party of Vietnam faces challenges in balancing economic liberalization with party political management	
		Anti-corruption drive and institutional reform	Vietnam is going through a "classic cyclical slowdown" driven by over-building of real estate and too much debt; investors are looking to the government to use the crisis to strengthen institutions and data transparency	

Sources: Lit. search, BMI report





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