

Realigning Priorities

In Focus:

Aligning infrastructure investment priorities – to communication, education and healthcare – in addition to mobility/transport.

Opportunities to bridge infrastructure investment gaps with public-private partnership (PPP) funding.

More infrastructure projects in ASEAN.



Wong Chew Hann
Head of ASEAN Equity Research

The Covid-19 pandemic has challenged public infrastructure investments with government balance sheets stretched due to pandemic management.

In 2020, Developing ASEAN economies' fiscal deficit as a ratio of GDP widened by 2.1ppts (Thailand), 2.5ppts (Vietnam), 2.8ppts (Malaysia), 3.9ppts (Indonesia), 4.2ppts (Philippines); and our Economics Team does not expect their deficit ratios to return to pre-pandemic levels before 2023. Yet, ASEAN's longer-term infrastructure needs will remain sizeable as economies rebuild.

Developing ASEAN'S negative fiscal balance (as a % of GDP) has widened considerably in 2020 due to pandemic management and contraction in economic activities

	2016	2017	2018	2019	2020	2021 YTD	2021F	2022F
Singapore	1.4	2.3	0.7	0.2	(13.9)	NA	(2.2)	0.5
Indonesia	(2.5)	(2.5)	(1.8)	(2.2)	(6.1)	(3.6)	(5.5)	(3.5)
Malaysia	(3.1)	(3.0)	(3.7)	(3.4)	(6.2)	(10.0)	(6.0)	(5.4)
Thailand	(2.8)	(3.5)	(3.0)	(3.0)	(5.1)	(4.5)	(4.8)	(3.5)
Philippines	(2.4)	(2.2)	(3.2)	(3.4)	(7.6)	(7.4)	(8.1)	(7.0)
Vietnam	(3.6)	(2.7)	(2.8)	(3.3)	(5.8)	3.2	(4.5)	(3.5)

Note: 2020YTD refers to 1Q 2021; Vietnam's budget utilization typically runs a surplus in the first quarter of the year, and only begin to ramp up with expenditure exceeding revenue collected towards the later part of the year
Source: CEIC, Maybank Kim Eng

In our view, as ASEAN recovers from the pandemic, its public infrastructure investment priorities will remain on both economic and social infrastructure, but in varying degrees among the economies, with the pandemic having revealed substantial investment gaps in segments like communication, education and health.

Fixed broadband connectivity has remained low at just under 20% in 2019 in Indonesia and the Philippines, and in the 40-50% range in Malaysia and Thailand. Healthcare expenditure per capita in Developing ASEAN substantially lags that of the developed economies and even Singapore.

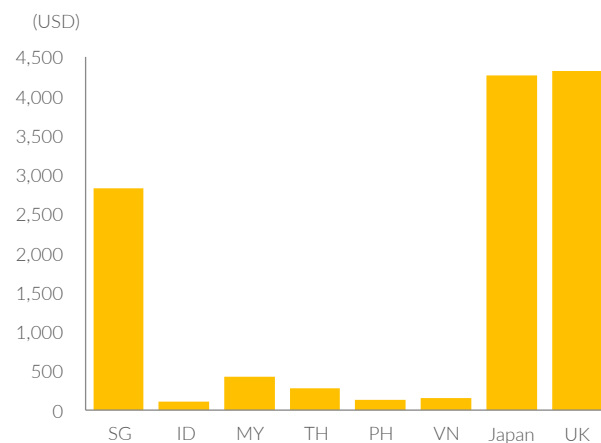
ASEAN’s investment gap in communication, especially in fixed broadband

	GDP/capita	LTE coverage	Fixed broadband	International bandwidth	Telecoms investment
		2019	2019	Ave 2017-19	Ave 2010-18
	(USD)	(Pop %)	(House %)	(kbits/s/pop)	(\$/pop)
Myanmar	1,408	76%	1%	3	N/A
Cambodia	1,643	80%	6%	18	23
Laos	2,535	43%	7%	14	15
Vietnam	2,715	97%	77%	16	N/A
Philippines	3,485	94%	19%	11	14
Indonesia	4,136	98%	14%	22	13
Thailand	7,808	98%	51%	71	27
Malaysia	11,415	93%	44%	56	73
Brunei	31,087	95%	69%	170	N/A
Singapore	65,233	100%	113%	806	157


Source: ASEAN Digital Masterplan 2015

Developing ASEAN’s under-investment in healthcare, with expenditure per capita substantially lagging that of the developed economies (2018)

“
Healthcare expenditure per capita in developing ASEAN substantially lags that of the developed economies and even Singapore.
”



Source: World Health Organisation



ASEAN's 'Industry 4.0'

As digital infrastructure supports 'Industry 4.0' innovations and drive longer-term productivity growth, investments in digital infrastructure – connectivity, storage, devices and applications – will accelerate.

The ASEAN Digital Masterplan 2025, launched during the height of the pandemic in 2020, may however see set-backs in some economies as government and private sector realign their priorities and business plans if the pandemic prolongs.

“

External funding from multi-lateral development banks, especially for public infrastructure, will also be needed more than before the pandemic.

”

Financing public infrastructure investments is expected to see the public-private partnership (PPP) model stepping up due to fiscal constraints.

A case in point is Malaysia's Klang Valley Mass Rapid Transit Phase 3 (KVMRT3) project, where the private finance initiative (PFI) model is being explored.

Digital infrastructure financing is expected to be largely private-sector led. Meanwhile, external funding from multi-lateral development banks, especially for public infrastructure, will also be needed more than before the pandemic.

Malaysia's major infrastructure projects pipelines are largely digital and urban transportation focused

The National Digital Infrastructure Plan will be under the public-private partnership model with 60% to be funded by industry players

Project	Est. Value (MYR b)	Updates
Digital		
National Digital Infrastructure Plan (JENDELA)	21.0	Phase 1 (2020-22): 96.9% mobile coverage (from 91.8%), 35 Mbps speed (from 25 Mbps) and 7.5 million premises passed Phase 2 (2022-25): Full deployment of 5G, thus boosting digital connectivity nationwide
Rail		
JB-SG Rapid Transit System (RTS)	3.715 (MY's portion)	G-to-G agreement inked on 30 Jul 2020 Ground-breaking ceremony held on 22 Nov 2020 Under public inspection (15 Mar – 15 Apr 2021) Construction in full-swing in 2021; target completion in 2026
KV Double Track Phase 2 (KVD2T)	4.475	An earlier award to Dhaya Maju LTAT S/B was cancelled in Aug 2020 An independent checking consultant will be appointed before the appointment of a new contractor via an open tender
KV Mass Rapid Transit 3 (KVMRT3)	45.0 (original); 22.5 (revision 1.0)	2021 Budget Speech said that the project will proceed Potential 50% reduction to its original cost of e.MYR45b Cabinet has given the go-ahead to proceed with the project in Mar 2021; MRT Corp to update earlier studies with a view to kick-start works in 2H 2021
KL-SG High Speed Rail (KL-SG HSR)	70.0	G-to-G decision to cancel the project (on 1 Jan 2021) due to disagreement on some changes proposed by MY MY has paid SG SGD102.8m/MYR320m for costs incurred (per joint announcement on 29 Mar 2011) MyHSR Corp Chairman said on 19 May 2021 that the HSR plan is still on track
Kuching Autonomous Rapid Transit (ART)	6.0	The ART system was proposed in Sep 2019 in favour of the LRT Funding from the 12MP Target commercial operations by 2025
Highways		
Sarawak Coastal Road & 2 nd Trunk Road	11.0	Coastal Road: Package 5 (MYR467m) awarded to a CMS led JV 2 nd Trunk Road: Tenders are believed to have opened
Sabah-Sarawak Link Road	1.2	Decision on Federal vs. State funding is pending
Others		
Penang Transport Master Plan (PTMP)	32.0	PDP agreement between SRS Consortium (40% held by Gamuda) and Penang State inked on 1 Jul 2020 Federal Government had declined a MYR2b loan guarantee for the Bayan Lepas-Komtar LRT component Island A development to be undertaken via a PFI structure (vs. PDP); SRS to enter into 2 JVs with the Penang State as Project Developer and Turnkey Contractor with Gamuda to take on Phase 1 reclamation works (announcement on 25 Mar 2021) Reclamation of Island A Phase 1 (1,200 acres) targeted to start by 3Q21

Source: Various (Compiled by Maybank Kim Eng)

Singapore will spend SGD85b into 2030 for its public transportation system, highways and roadworks, and air travel infrastructure

Projects	SGD b	Timeline
Rail		
Thomson - East Coast Line	25	2024
Jurong Regional Line	0.7	2026 - 2028
Cross Island Line	41	2030
Highways & Roadworks		
North-South Corridor Highway	7-8	2026
Jurong East Integrated Transport Hub	0.5	2027
Air Travel		
Changi Airport Terminal 5	10	2030
Ports		
Tuas Mega Port	40	2021 - 2040
Others		
Expansion of Integrated resorts	9	2025
Mandai Nature Project	1	2023

Source: BCA, URA, news reports

Indonesia's major infrastructure projects are mainly rail, port and highways/roads related

Projects	Est. Value (IDR b)	Updates
Rail		
Jakarta - Bandung High Speed Railway	80,000	In construction phase with commercial target in 2023
Light Rail Transport Jabodetabek (phase 1)	23,000	In construction phase with operational target in 2H22
Mass Rapid Transport Jakarta (phase 2)	22,500	At initial start with completion target in 2027
Port		
Patimban Seaport	43,200	Funded by The Japan International Cooperation Agency (phase 1) and state budget (phase 2) Project progress: dock and reclamation (>82%), breakwater and sea wall (>56%)
Kuala Tanjung International Hub Seaport	30,000	Part of national strategic projects In construction stage
Toll Roads		
Trans Sumatera	206,400	Consisting of 15 sections, the project (2,818 km) will connect Aceh with Bakauheni (Lampung province) Hutama Karya is the main contractor
Gedebage - Tasikmalaya - Cilacap	57,590	The project is in the tender process for phase 1 Total length: 206km
Solo - Yogyakarta - YIA	26,600	Total length: 96.6km In construction phase with completion target in 2024
Cikunir - Karawaci	26,150	In the tender phase (3Q21)
Kamal - Teluk Naga - Rajeg	23,160	In the preparation stage for tender
Probolinggo - Banyuwangi	21,000	Several issues (fund for land clearing and change of traffic forecast) still exist which delayed the project's construction which should have started in 3Q20
Jakarta Outer Ring Road (JORR) elevated	20,050	In the preparation stage for tender

Source: Various (compiled by Maybank Kim Eng)

Thailand's major infrastructure investments will also be in energy/renewables

Projects	Est. Value (THB b)	Updates
Mass Transit		
Mass Transit Orange Line	127	TOR out, bidding called
Mass Transit Purple Line (Southern)	100	PPP on net cost basis (i.e. developer/operators collect ticket proceeds) TOR out, bidding called
Red Line Mass Transit - four routes	63	PPP on gross cost basis (O&M revenue basis) Waiting for the PPP terms approval
Thailand-China High Speed Railway	200	To connect Kunming Rail from China 250km distance, only 5km rolled out, project is suspended on design and EIA issues
Railways		
Dual Tracking – nine projects	320	Two under bidding, two have EIA and awaiting Cabinet approval, two have EIA and under project review, three still in the EIA approval phase
Energy/Renewable		
Community Solar Farm	300MW	Private sector, under PPA
Municipal Solid Waste (MSW) Power	160MW	36 sites have been identified 33MW already operational, 127MW under bidding process Roll out is localized Under PPA agreement
Biomass Power	3,630MW	No details yet
Biogas	600MW	No details yet
Regional Economic Development		
Eastern Economic Corridor (EEC)	1,500	Funding for the basic infrastructure under PPP Government provides incentive under special EEC Act Government rolls out the five basic infrastructure, under PPP: Expansion of U-tapao Airport (THB200b), Rail link to Bangkok (THB236b), MRO (THB10b), Expansion of 2 deep seaports (THB165b)
Southern Economic Corridor (SEC)	400	Private sector undertaking, government to provide incentives Currently pending EIA and HEIA approval (community consultation) The Chana Industrial Estate has already been identified
Air		
Suvarnabhumi Expansion (Phase 2)	52	AOT – an SoE – is the project owner and operator
U-tapao Airport Expansion	200	Under the EEC development

Source: Various (compiled by Maybank Kim Eng)

Vietnam's major infrastructure projects span from airport to expressways and urban metro, with expressways under a mix of public and public-private partnership (PPP) funding

Project	Sub-project	Type	Length (km)	CAPEX (VND b)	Start	End
Expressways						
North-South - Eastern part	Mai Son - Thanh Hoa	Public	63	12,111	Sep 2020	Dec 2022
North-South - Eastern part	Cam Lo - La Son	Public	102	7,900	Sep 2019	2021
North-South - Eastern part	Vinh Hao - Phan Thiet	Public	106	19,648	Sep 2020	Dec 2022
North-South - Eastern part	Phan Thiet - Dau Giay	Public	98	19,571	Sep 2020	Dec 2022
North-South - Eastern part	My Thuan Bridge 2	Public	7	5,003	Aug 2020	Dec 2023
North-South - Eastern part	My Thuan - Can Tho	PPP	23	4,826	Dec 2020	Dec 2023
North-South - Western part	My An - An Binh	Public	25	4,500	2021	2025
North	Cao Bang - Lang Son	PPP	115	20,930	Dec 2020	2024
North	Bac Ninh - Ha Long	N/A	136	n.a	2021	n.a
North	Van Don - Mong Cai	PPP	80	13,000	Apr 2019	2021
North	Doan Hung - Tuyen Quang	N/A	18	n.a	2021	2023
South	HCM - Moc Bai	PPP	55	13,600	2021	2025
South	Can Tho - Ca Mau	Public	150	46000 - 61000	2021	2025
South	An Huu - Cao Lanh	Public	28	5,500	2021	2025
Hanoi	Ring Road 4	Public	98	66,500	2021	2025
Metro						
Hanoi Metro No.2A			13.1	18,000	Oct 2011	Dec 2020
Hanoi Metro No.3	Nhon - Hanoi railway station		12.5	32,910	Oct 2010	2021 - 2022
Hanoi Metro No.3	Hanoi railway station - Hoang Mai		8.8	40,577	2022	2028
Hanoi Metro No.5			34.5	65,404	2022	2025
Hochiminh Metro No.1			19.7	47,756	Aug 2012	Dec 2021
Hochiminh Metro No.2	Ben Thanh - Tham Luong		11.2	47,891	3Q21	2026
Airport						
Long Thanh Airport			N/A	109,000	Jan 2021	2025

Source: Various (compiled by Maybank Kim Eng)

Philippines' major infrastructure projects pipeline are focused on transport and mobility

Projects	Est. Value (PHP b)	Updates
<u>Airport</u>		
New Manila International Airport	735.7	Franchise to build, operate and maintain awarded in Jan 2021 Groundbreaking ceremony to be held 2Q21 Operations to begin by 2025
Ninoy Aquino International Airport	148.4	Efforts to privatize NAIA have stopped for the time being
<u>Rail</u>		
Metro Manila Subway Project Phase 1	357.0	Groundbreaking ceremony held in 1Q19 The first boring machine arrived in Feb 2021 with excavation activities to start in 4Q21 Full completion estimated by 2025
PNR South Commuter	344.6	Awarding of contract packages targeted for mid 2021
PNR North 2	283.8	PNR North 2 stands at approximately 30% overall progress Partial operations for PNR North 2 to start in 2022 with full completion in 2025
PNR South Long Haul	175.3	First civil contracts to be awarded in 3Q21
PNR North 1	149.1	Partial operations to start in 2Q22 with full completion in 3Q25 Stands at more than 40% overall progress
Mindanao Rail Project Phase 1	81.7	Partial operations to start in 4Q21 Target completion of road right of way in 3Q21
C5 MRT 10 Project	81.5	Construction to start in 4Q21 and completed in 2022
Cebu Monorail System	78.9	Currently in advanced stages of government approval
MRT 7	75.0	Slated for partial operations by end 2021 Stands at more than 50% overall progress Full completion estimated by December 2022
MRT 11	71.1	For evaluation/review
LRT 1 Cavite Extension Project	64.9	Stands at more than 50% overall progress Partial operations set to start in 4Q21 with full completion in 2022
LRT 6 Cavite Line A	50.4	For evaluation/review
Subic Clark Railway	50.0	Notice of Award was received in March 2021 Full completion pushed back to 4Q24 from 4Q22
MRT 4	49.8	Detailed engineering design phase to begin in 2021 Construction estimated to begin in 2023
<u>Highways & Bridges</u>		
Quezon-Bicol Expressway	87.3	Received approval from House Committee on Public Works and Highways in 1Q21
Davao City Expressway	80.7	Currently in advanced stages of government approval
Cebu-Mactan Bridge and Coastal Road Construction Project	76.4	Loan agreement with Jica signed in June 2020 Full completion slated for 2028
Panay-Guimaras Negros Bridge Phase 1	65.7	Pre-feasibility study finished in Feb 2021

Source: National Economic Development Authority, Various (compiled by Maybank Kim Eng)