APAC Data Centers

A Supply Surprise | August 2026

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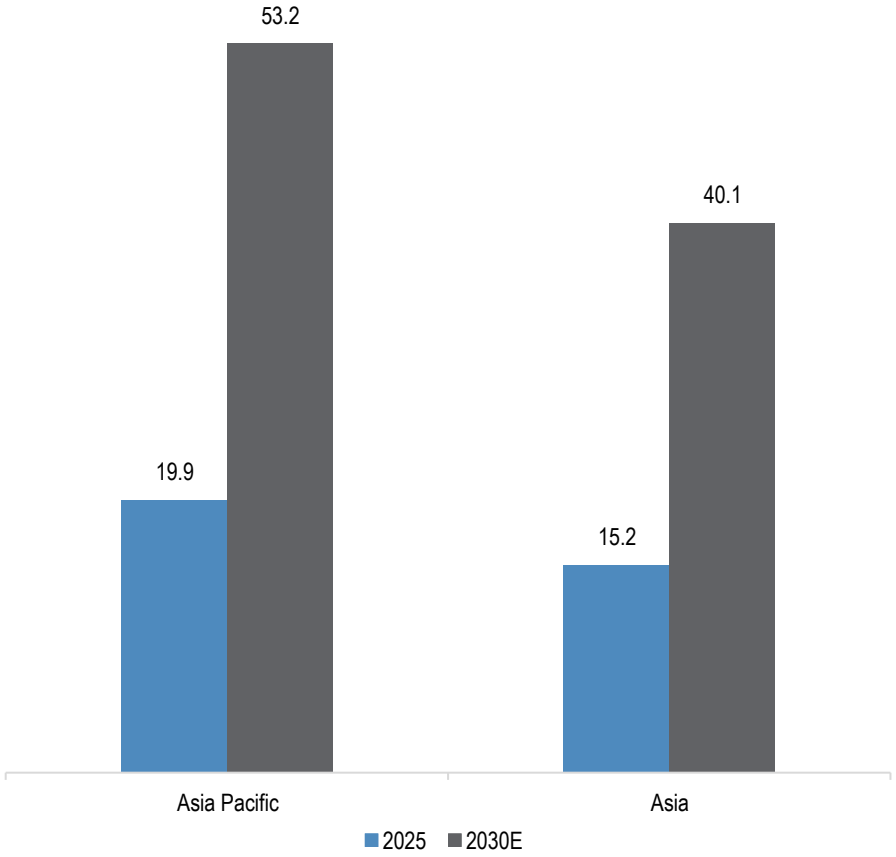
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APAC will see large AI-driven data center buildout; total capacity (ex-CN) to increase from 20GW to 53GW by 2030E

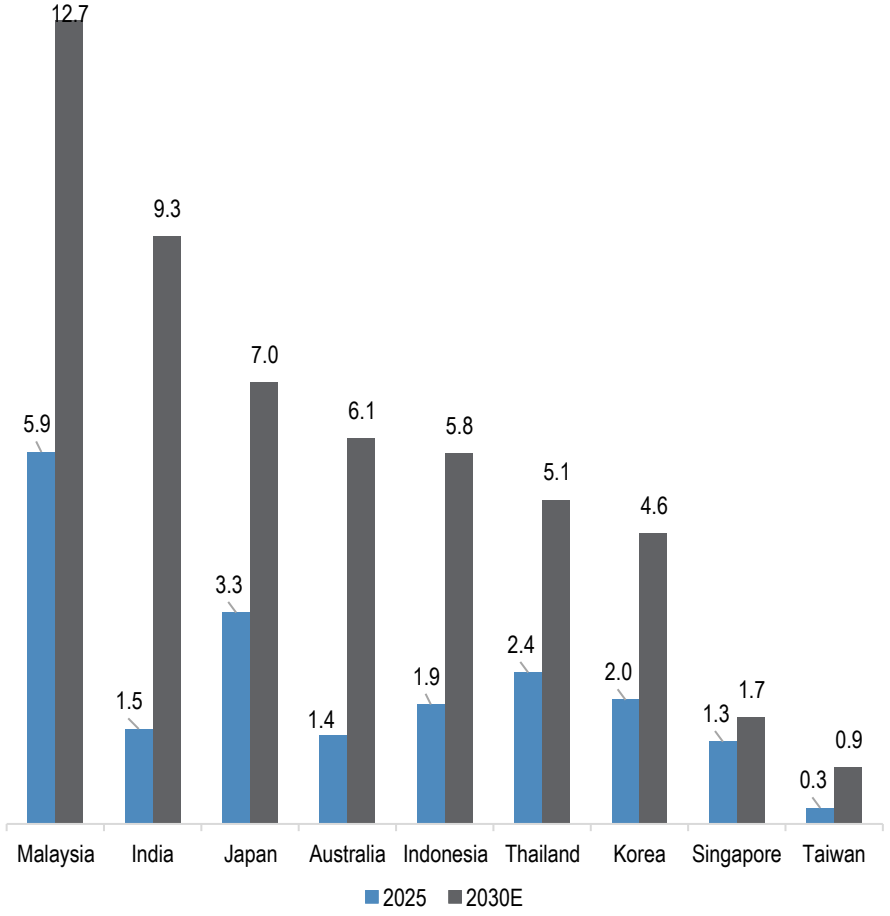
This will be led by India, Malaysia, Australia, Japan and Indonesia

APAC AND ASIA (EX-CHINA) DATA CENTERS CAPACITY 2025-2030E (GW)



Source: J.P. Morgan.

ALL APAC COUNTRIES WILL SEE LARGE BUILDOUT OF DATA CENTERS



Source: J.P. Morgan.

A long list of DC operators in the region

Including hyperscalers, global and regional DC operators, and regional telcos

MAJOR DATA CENTER PLAYERS IN ASIA PACIFIC (EX-CHINA)

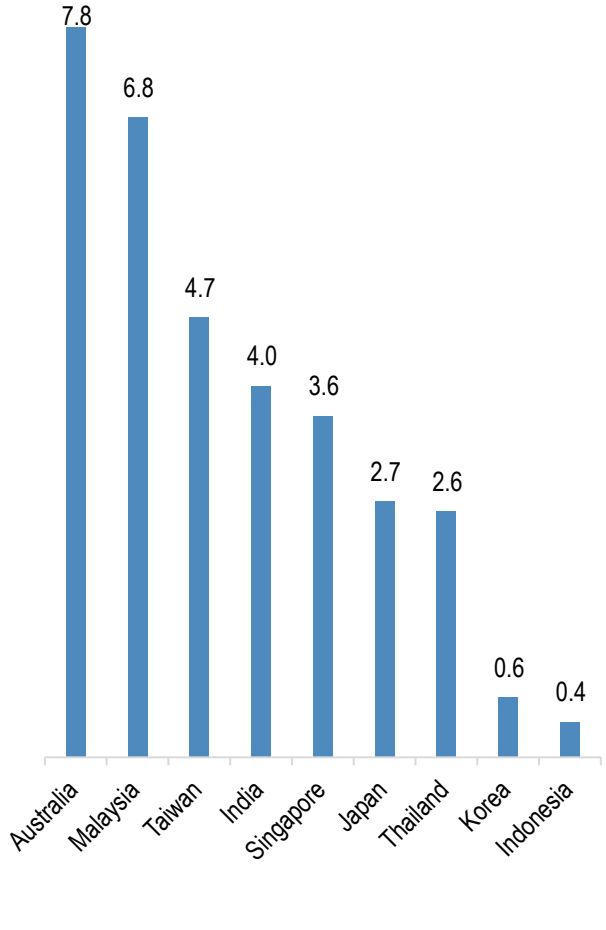
Regional DC Players			
AirTrunk	Australia	AU, HK, IN, JP, MY, SG	Blackstone and CPPIB.
Bridge DC	Singapore	IN, MY, TH	Bain Capital.
CDC	Australia	AU, NZ	NZ-based Infratil and Australia's SWF.
CtrlS Datacenters	India	IN	8.25% owned by CPP.
DCI Indonesia	Indonesia	ID, SG	Independent operator.
K2 Strategic	Singapore	ID, MY, TH	The Kuok Group.
Keppel DC REIT	Singapore	AU, CN, JP, MY, SG	DC subsidiary of Keppel Ltd.
MC Digital Realty	Japan	JP	A 50/50 JV between Mitsubishi Corp. and Digital Realty.
NextDC	Australia	AU, JP, MY, NZ	Independent operater.
Princeton Digital Group	Singapore	CN, ID, IN, JP, KR, MY, SG	Warburg Pincus and Mubadala.
True IDC	Thailand	MM, TH, VN	The Cahroen Pokphand Group (CP Group).
Yotta Data Services	India	IN	Nidar Infrastructure, owned by Hiranandani Group.
YTL DC	Malaysia	MY, SG	YTL Power, a subsidiary of YTL Corp.
Hyperscalers			
Alibaba Cloud	China	CN, HK, ID, JP, KR, MY, PH, SG, TH	Cloud subsidiary of Alibaba Group.
Amazon Web Services	United States	CN, HK, ID, IN, JP, KR, MY, SG, TH, TW	Cloud subsidiary of Amazon.com, Inc.
Azure	United States	AU, CN, HK, ID, JP, KR, MY, SG, TH, TW	Cloud subsidiary of Microsoft.
ByteDance	China	CN, ID, MY	Owned by institutional investors, employees and founders.
Google	United States	IN, JP, MY, SG, TH, TW	Owned by Alphabet Inc.
Huawei Cloud	China	ID, HK, SG	Cloud subsidiary of Huawei Group.
Meta	United States	SG	Owned by founders and public shareholders.
Tencent Cloud	China	CN, ID, JP, KR, MY, SG, TH	Cloud subsidiary of Tencent Holdings Ltd.
Telecom Operators			
BDx Indonesia	Singapore	CN, HK, ID, SG, TW	A JV between BDx DC (SG) and Indosat.
Chief Telecom	Taiwan	TW	56.3% owned by Chunghwa Telecom.
Chunghwa Telecom	Taiwan	TW	Majority owned by Ministry of Transport and Comm.
KT Cloud	South Korea	KR	Owned by KT Corp.
LG U+	South Korea	KR	Owned by LG Corp and LG Group.
Neutra DC	Indonesia	ID, SG	Data center subsidiary of Telkom Indonesia.
NTT GDC	Japan	HK, ID, IN, JP, MY, SG, TH, VN	Owned by NTT.
Nxera	Singapore	ID, IG, MY, TH	Singtel's data center business platform.
Nxtra	India	IN	Data center subsidiary of Bharti Airtel (Indian telco).
SK Telecom	South Korea	KR	Owned by SK Group.
STT GDC	Singapore	ID, IN, JP, KR, MY, PH, SG, TH, VN	Owned by KKR and Singtel.
Telekom Malaysia	Malaysia	HK, MY	20% owned by Khazanah.

Source: J.P. Morgan.

Unit development costs vary by country/market, subject to their availability of land, labor, materials, etc.

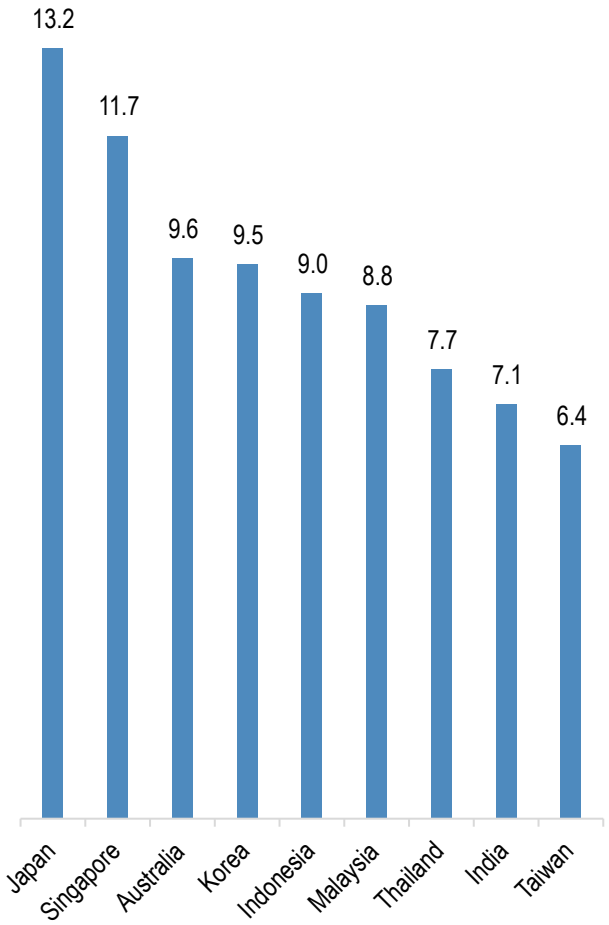
Japan has the highest unit development cost, but Malaysia will see the largest capex

DC CAPACITY INCREASE, 2025-2030E (GW)



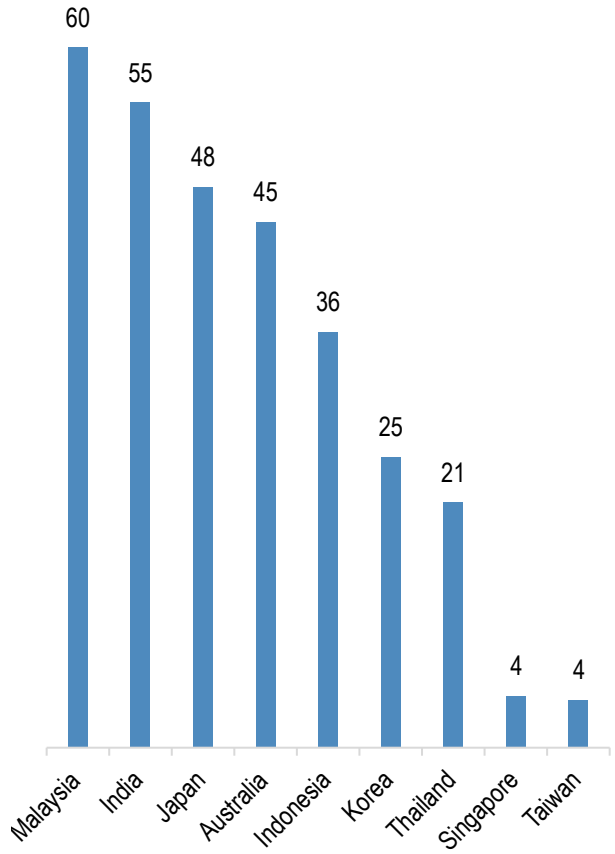
Source: J.P. Morgan estimates.

UNIT DEV. COST (US$MN/MW)



Source: Cushman Wakefield, and J.P. Morgan.

DEV. COST (US$BN), 2025-2030E



Source: J.P. Morgan estimates.

Banks are currently the main source of funding with more restrictive terms

Capital markets will need to step up, given the sheer size of the funding needs

APAC (EX-CHINA) – GENERIC TERMS FOR BANK FINANCING FOR DATA CENTERS

	DevCo (greenfield) Single asset / Construction loan	DevCo (greenfield) Borrowing Base Revolver	StableCo (brownfield)
Leverage / Sizing	70–80% gearing	Stabilized: 60–70% LTV	LTV: 60–65%
	DSCR: 1.20–1.25x during lease, 1.4–1.7x thereafter (can include 2-step DSCR increase during and after extension option)	Contracted: 70–80% LTC	May require additional covenants e.g. Leverage (~6–10x) and/or ICR (1.2x)
		May require additional covenants e.g. Debt Yield although less common in SEA	
Term	Up to 5 years including extension option	Up to 5 years including extension option	Up to 5 years including extension option
Margin above SOFR	225–275bps	250–300bps	200–250bps
Upfront fees	150–200bps	150–200bps	150–200bps
Amortization	Partly amortizing or bullet (if debt capacity capped by gearing)	Typically, bullet at maturity	Typically, bullet at maturity
Key Considerations (positive)	Generally lower cost than Borrowing Base structure	Less strict drawdown conditions and monitoring requirements	Lower pricing due to operating nature of portfolio
	Can be refinanced into an amortizing single-asset project financing on similar DSCR sizing criteria	Flexibility to move assets in and out of collateral pool	DevCo contributes stabilized asset at 3rd party appraised value to StableCo
Key Considerations (negative)	Structured as a project financing with strict drawdown conditions, financial covenants and monitoring requirements	Generally higher cost than single asset project financing	Proceeds flow back to DevCo and retire construction loan / pay down revolver

Source: J.P. Morgan.

APAC (ex-China) to spend ~US$300bn on DC by 2030E, which may translate into US$95bn of bond issuance

Volume of issuance (~10% of supply) looks manageable for the market to absorb

APAC (EX-CHINA) DC ISSUANCE

(US$bn)	Southeast Asia					North Asia		APAC others		Total	
	Malaysia	Indonesia	Thailand	India	Singapore	Korea	Taiwan	Japan	Australia	Asia	APAC
DC capacity (GW)											
2025	5.9	1.9	2.4	1.5	1.3	2.0	0.3	3.3	1.4	15.2	19.9
2030E (est.)	12.7	5.8	5.1	9.3	1.7	4.6	0.9	7.0	6.1	40.1	53.2
Incremental capacity	**6.8**	**4.0**	**2.7**	**7.8**	**0.4**	**2.6**	**0.6**	**3.6**	**4.7**	**24.9**	**33.3**
Cost per MW (US$mn)	8.8	9.0	7.7	7.1	11.7	9.5	6.4	13.2	9.6	NA	NA
DC capex	60.0	35.6	21.0	55.3	4.4	24.9	4.1	48.0	45.0	205.4	298.4
Debt as % of capex (est.)	*80%*	*80%*	*80%*	*80%*	*80%*	*80%*	*80%*	*80%*	*80%*	*80%*	*80%*
Debt funding for add. capex	**48.0**	**28.5**	**16.8**	**44.2**	**3.5**	**19.9**	**3.3**	**38.4**	**36.0**	**164.3**	**238.7**
Refinancing of existing debt (50%)	20.7	6.8	7.4	4.3	6.1	7.4	0.6	17.6	5.4	53.3	76.3
Total funding requirement	**68.7**	**35.3**	**24.2**	**48.5**	**9.6**	**27.4**	**3.9**	**56.1**	**41.4**	**217.6**	**315.0**
Bond as % of incremental debt (est.)	*30%*	*30%*	*30%*	*30%*	*30%*	*30%*	*30%*	*30%*	*30%*	*30%*	*30%*
Total bond issuance by 2030	**20.6**	**10.6**	**7.2**	**14.5**	**2.9**	**8.2**	**1.2**	**16.8**	**12.4**	**65.3**	**94.5**
Avg annual issuance (2027-30)	**5.2**	**2.6**	**1.8**	**3.6**	**0.7**	**2.1**	**0.3**	**4.2**	**3.1**	**16.3**	**23.6**

Source: DC Byte, The Economic Times, Cushman & Wakefield and J.P. Morgan estimates.

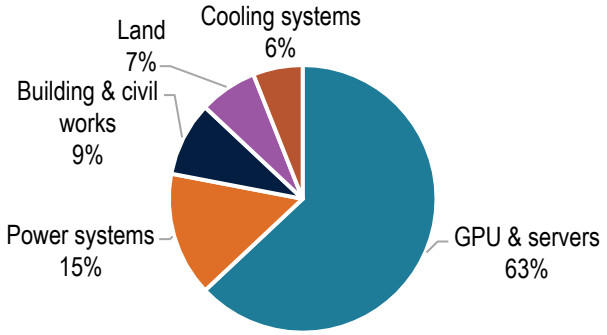
Our forecasts are sensitive to % of debt-financing and funding mix; our numbers do not include China and GPU

China will invest heavily in DCs and GPU financing is heavy

SENSITIVITY AND LIMITATIONS

- We assumed that 80% of development cost will be debt funded, out of which 30% will be funded by the bond market. We also assume ~50% of existing DCs will be refinanced.
- China is expected to spend ~US$300bn on DCs over the next few years. This will be largely funded domestically and is thus excluded from our forecast.
- We have not included GPU financing, which could be 4-5x multiple of DC capex (excluding power) in APAC.

BIG FOUR HYPERSCALERS COMBINED CAPEX BREAKDOWN



Source: Alphabet, Microsoft, Amazon, Mesta and J.P. Morgan. Note: 2026 data.

SENSITIVITY OF ASIA (EX-CHINA) DC BOND ISSUANCE (US$BN)

		Debt as % of capex					
	65	50%	60%	70%	80%	90%	100%
Bond as % of total debt	10%	14	16	19	22	24	27
	20%	27	33	38	44	49	54
	30%	41	49	57	65	73	82
	40%	54	65	76	87	98	109
	50%	68	82	95	109	122	136

Source: J.P. Morgan.

SENSITIVITY OF APAC (EX-CHINA) DC BOND ISSUANCE (US$BN)

		Debt as % of capex					
	95	50%	60%	70%	80%	90%	100%
Bond as % of total debt	10%	20	24	28	32	35	39
	20%	39	47	55	63	71	79
	30%	59	71	83	95	106	118
	40%	79	95	110	126	142	158
	50%	98	118	138	158	177	197

Source: J.P. Morgan.

Several key considerations for APAC bond issuance, particularly lease tenure and geopolitics

Short tenure raises refinancing risks and presence of China hyperscalers could deter some investors

APAC DATA CENTERS HAVE SHORTER TENURE, POTENTIALLY RAISING REFINANCING RISK

US DC	Lease term (years)	Asia DC	Lease term (years)
Beignet	20	Bridge Data Centres	5-10
QTS	15-20	STT	7-15
RD Michigan	18	AirTrunk	7-15
Beacon Point	15		
Hut 8	15		

Source: J.P. Morgan.

KEY ASIA DATA CENTERS HOSTING CHINESE HYPERSCALERS

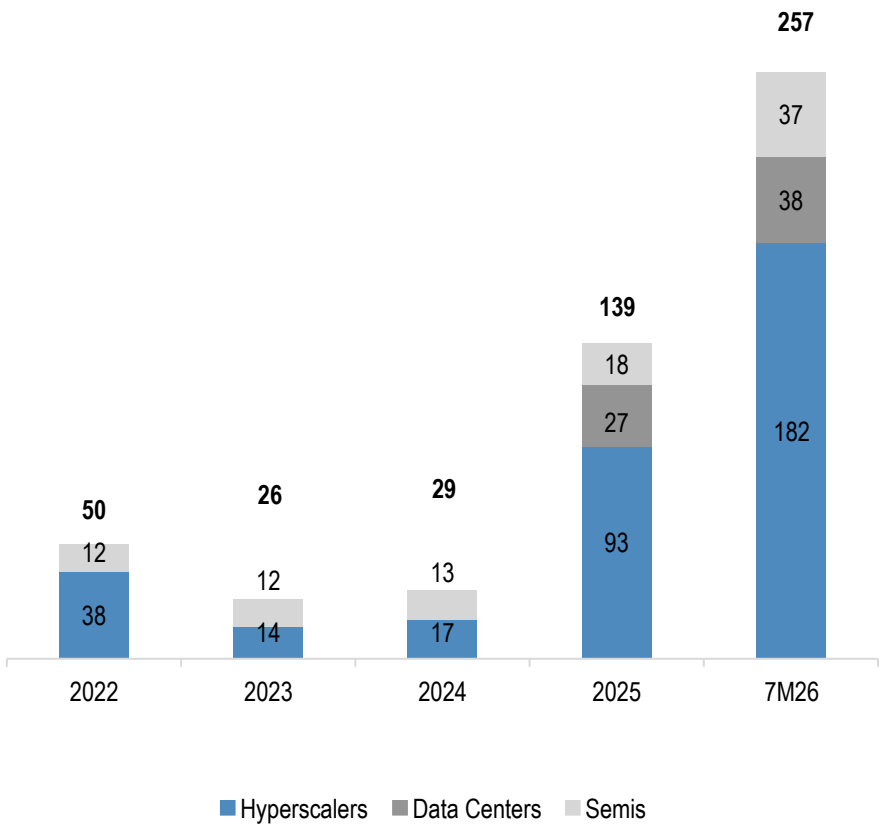
Company	DC location	Chinese hyperscaler
AirTrunk	Malaysia	ByteDance
Bridge DC	Malaysia	ByteDance
DCI Indonesia	Indonesia	Alibaba, Huawei, ByteDance
Digital Edge	Indonesia	Tencent
GRM Malaysia	Malaysia	Tencent
Hatten Land	Malaysia	Huawei
Planet Comm	Thailand	Huawei
True IDC	Thailand	Alibaba, Huawei, Tencent

Source: J.P. Morgan.

A surge in AI capex issuance has pushed hyperscalers' spreads widen, but spillover to the overall market is limited

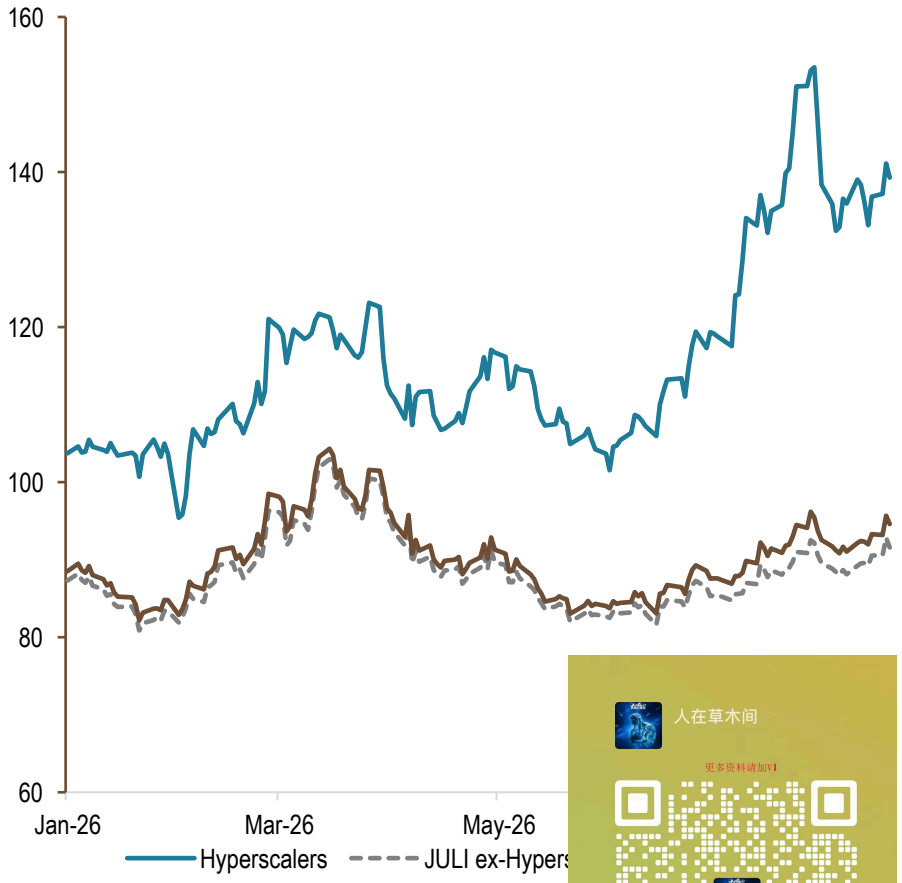
Some pointers on how APAC credit market will react to DC supply

AI CAPEX ISSUANCE IN THE US HG BOND MARKET



Source: J.P. Morgan.

HYPERSCALER SPREADS HAVE WIDENED MEANINGFULLY YTD, BUT SPILLOVER IMPACT TO JULI IS LIMITED



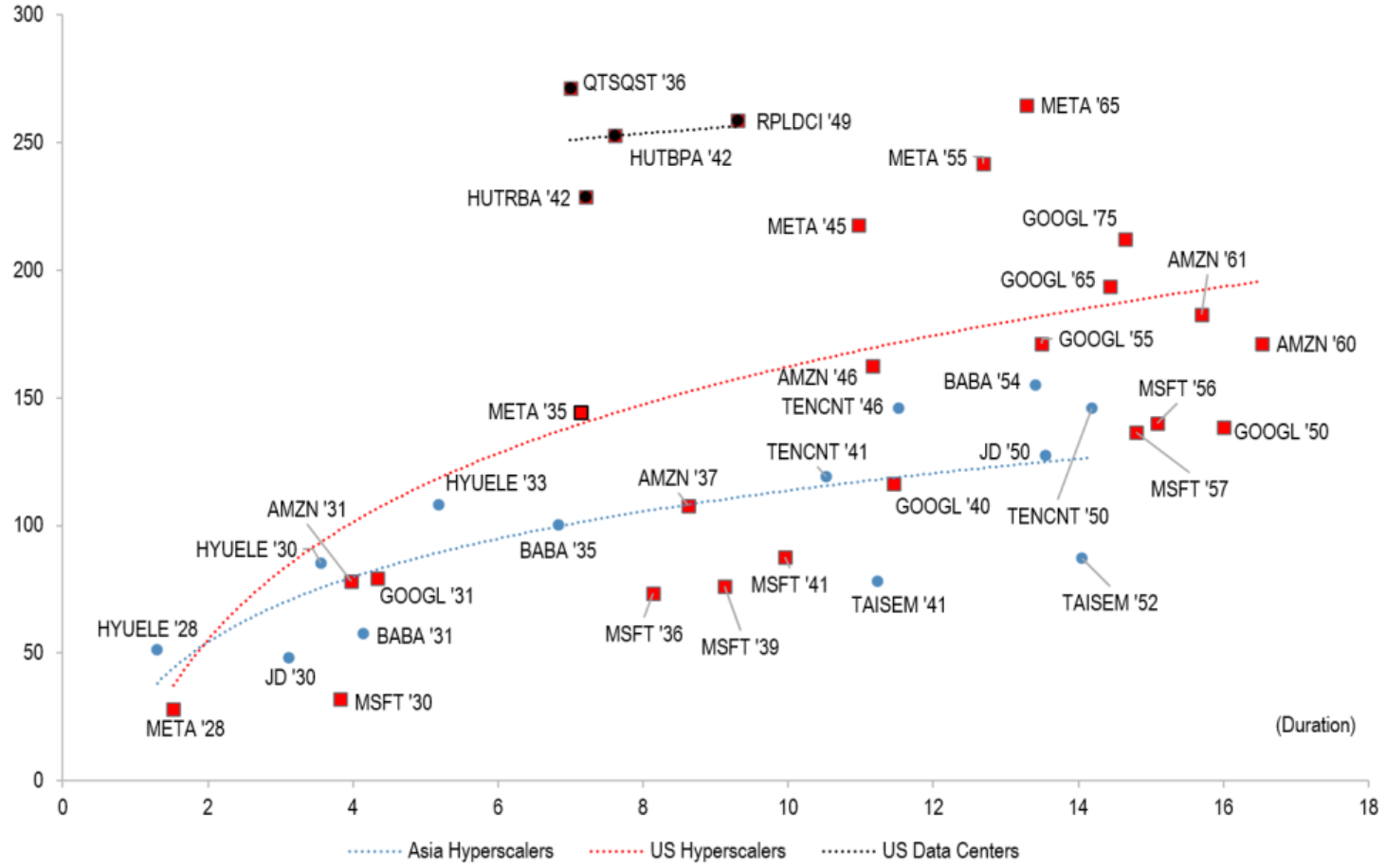
Source: J.P. Morgan.

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更多资料请加V

US tech and DCs are trading at wider spreads than Asia TMT, poising some repricing risks

Expect APAC DC bonds will be priced close to (if not wider than) US deals

US TECH IS TRADING 70-185BP WIDER THAN ASIAN TECH

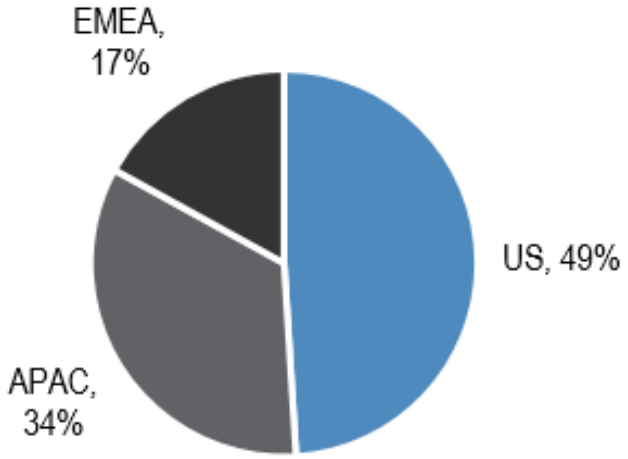


Source: J.P. Morgan.

Asia TMT will likely feel the brunt of the supply pressure, but some nuances for different market and tenure

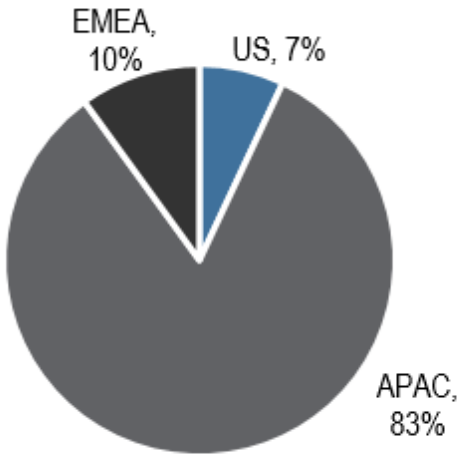
Presence of strong local investor base could cushion the impact

SK HYNIX ’30S (ISSUED IN SEPT 2025) - GEOGRAPHICAL ALLOCATIONS OF NEW ISSUE



Source: J.P. Morgan.

TAIWAN SEMICONDUCTOR ’36S (ISSUED IN JUNE 2026) – GEOGRAPHICAL ALLOCATION OF NEW ISSUE



Source: J.P. Morgan.

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