

China Software & IT Services

China cloud landscape changing

China cloud market landscape is changing that non-internet cloud service providers are gaining share over AliCloud/ Tencent Cloud. Huawei China IaaS + PaaS share was up 2.4 pct pts to 10.9% in 1Q21 and China Telecom is expected to spend big (RMB59.7bn) on cloud post A-share IPO. Among the cloud supply chain, we prefer Chinasoft (Huawei cloud exposure) over Kingsoft Cloud/ GDS.

- Huawei accelerating cloud transformation, China Telecom to spend big in cloud post A-share IPO.** Huawei is strategically shifting to software and cloud services after hardware business being affected by US ban. The Company targets to become APAC top 3 cloud service providers in 3 years and IDC suggested Huawei market share in China IaaS + PaaS was 10.9% (+2.4 pct pts YoY). Meanwhile, China Telecom is expected to spend at least RMB59.7bn on cloud capex/ R&D in coming three years. The Company could raise up to RMB54bn in A-share IPO.
- Internet companies may slow capex amid regulatory headwinds.** We are concerned that internet cloud service providers would slow capex/ capacity ramp up schedule in IDC in the short term given regulatory headwinds. AliCloud reported 2Q21 cloud revenue growth of +29% YoY (vs. +37% YoY in 1Q21). According to IDC, AliCloud/ Tencent Cloud lost share (-2.5pct pts/ -0.7 pct pts) in 1Q21 China IaaS + PaaS market, and we believe this is related to the crackdown across the internet industry.
- Beijing announced tightened data center energy saving policy.** On 22 July, Beijing announced new rules towards newly-built data centers. This includes tightening PUE requirement to below 1.3 (vs. 1.4 in 2018 policy), imposing additional electricity charge if PUE requirement is not fulfilled and establishing energy consumption monitoring system. Beijing is the first city to launch such detailed and stringent rules towards data center industry and we are afraid that other cities will follow. In the long term, this may result in lower gross margin (30% of COGS being utility) and slower expansion (increasing difficulty in getting land and energy approval for the IDC sector).
- Prefer cloud players that their customers have lower regulatory risk.** We raised Chinasoft FY21-22E net profit by 2-13% on higher top-line related to emerging cloud business (39% CAGR for emerging business vs. 15% CAGR for traditional IT services in FY20-23E). Maintain BUY with target price of HK\$18.45 on higher 30x FY22E P/S (in-line with Indian IT avg.). We have not changed our forecast on GDS but cut target price to US\$81.20/ HK\$78.63 on lower target multiple of 25x FY22E EV/EBITDA (prior 30x) to reflect increasing uncertainty in customers' cloud investment/ ramp-up schedule.

Valuation Table

Company	Ticker	Rating	Price (LC)	TP (LC)	EV/sales FY21E	P/E FY21E	ROE FY21E	Sales CAGR FY20-23E
Chinasoft	354 HK	BUY	15.36	18.45	2.0	33.2	13%	22%
Kingsoft Cloud	KC US	BUY	29.56	43.85	3.9	n.a.	n.a.	42%
GDS	GDS US	BUY	58.85	81.20	10.6	n.a.	n.a.	33%
GDS	9698 HK	BUY	58.10	78.63	10.8	n.a.	n.a.	33%

Source: Bloomberg, CMBIS estimates

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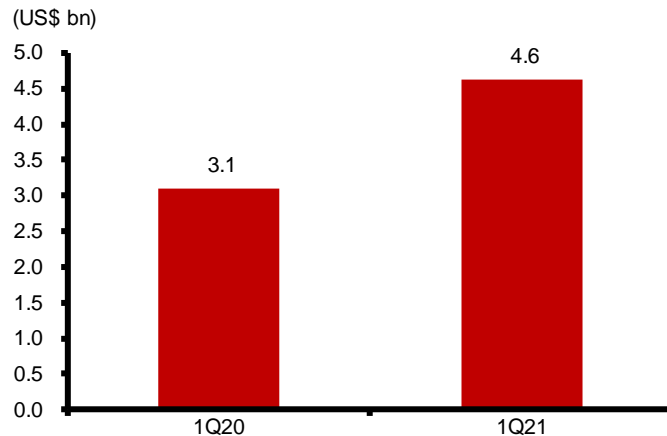
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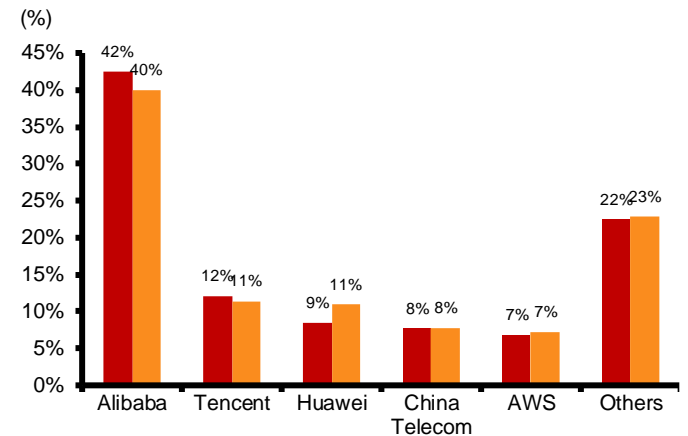
Focus Charts

Figure 1: China IaaS + PaaS market (1Q21)



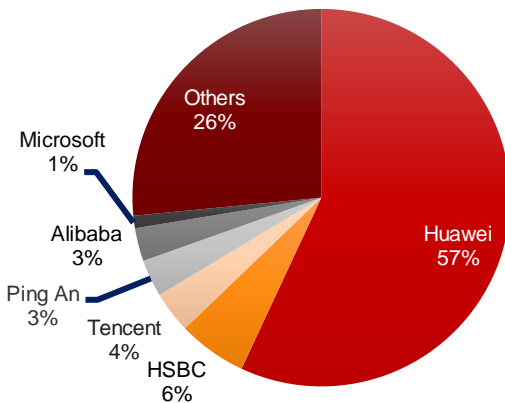
Source: IDC, CMBIS

Figure 2: China IaaS + PaaS market share (1Q21)



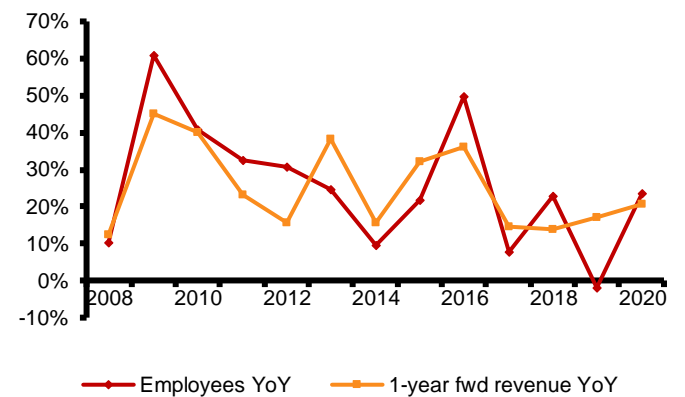
Source: IDC, CMBIS

Figure 3: Chinasoft customer breakdown (2020)



Source: Company data, CMBIS estimates

Figure 4: Chinasoft forward revenue and employees



Source: Company data, CMBIS estimates

Figure 5: GDS continuous customer wins



Notes:
1. Azure China is operated by a subsidiary of 21Vianet.
2. AWS Ningxia region is operated by NWCD and AWS Beijing region is operated by Sinnet

Source: Company data, CMBIS

Figure 6: Alibaba/Tencent: 47% of 1Q21 revenue

By Revenue ⁽¹⁾

End User	% Of 1Q21 Total Net Revenue
Customer 1	24.3%
Customer 2	23.3%
Customer 3	8.7%
Customer 4	6.9%
Customer 5	3.3%

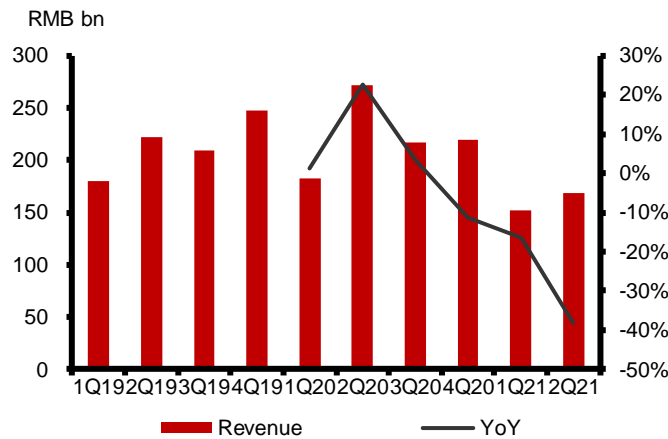
Source: Company data, CMBIS

China cloud market landscape change

Huawei Cloud targets to become top 3 in APAC in the next 3 years

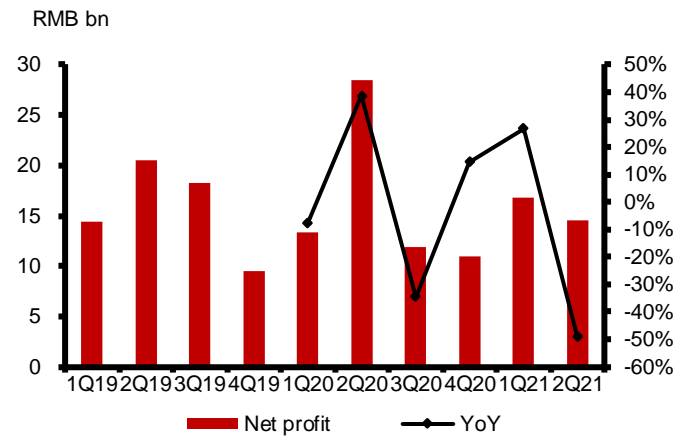
Huawei is strategically shifting to software and cloud services after hardware business being affected by US ban. Huawei 1H21 revenue was down 29% YoY but it was still able to achieve net profit of RMB31.4bn which could support its R&D for the transition plan. [SCMP reported](#) that Huawei targets to become a top 3 cloud services provider in APAC in the next three years, according to Zeng Xingyun (president of Huawei Cloud operations in the region). The company has earmarked US\$100mn to encourage start-ups in the region to use its cloud platform. Also, it has trained a group of more than 40,000 people in the region on information and communication technologies to help customers move to Huawei ecosystem. We believe Huawei will accelerate the transformation and Chinasoft will benefit the most, as a key IT service partner to Huawei. From IDC data, Huawei has 10.9% share (+2.4pct pts YoY) in China IaaS + PaaS market in 1Q21.

Figure 7: Huawei revenue (quarterly)



Source: Company data, CMBIS

Figure 8: Huawei net profit (quarterly)

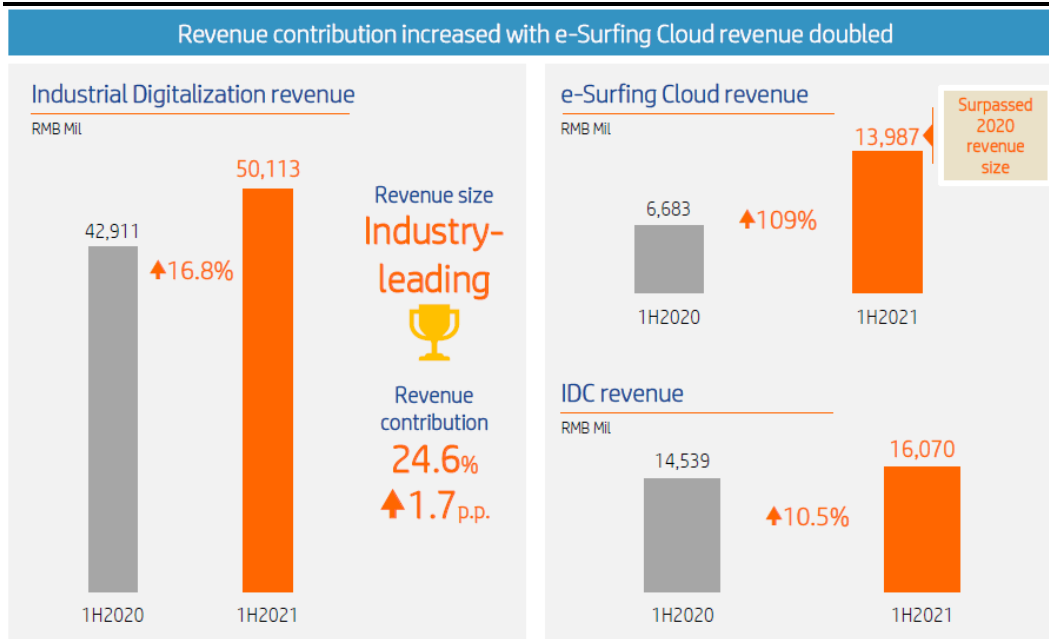


Source: Company data, CMBIS

China Telecom to spend big in cloud infrastructure post A-share IPO

China Telecom could raise up to RMB54bn (assuming green shoes are fully exercised) through IPO on the Shanghai Stock Exchange. In the meantime, the Company laid out a 3-year investment plan in cloud infrastructure (server, cabinets, network, security, operating system) and cloud platform services R&D that could amount to RMB59.7bn. China Telecom delivered strong growth cloud revenue growth of +109% YoY in 1H21 to RMB14bn. IDC revenue was up at +10.5% YoY to RMB16.1bn. In 1Q21, China Telecom has 7.8% in China IaaS + PaaS market, according to IDC.

Figure 9: China Telecom cloud business revenue (1H21)



Source: Company data, CMBIS

Figure 10: China Telecom targets to spend RMB50.7bn on cloud infrastructure in the coming 3 years.

项目初步计划投资规模为 507 亿元。具体构成如下表所示：

具体投资及用途		投资金额（亿元）
1	设备采购	435
2	软件采购	15
3	工程设计及监理	20
4	工程集成和施工	37
合计		507

计划进度	天翼云	数据中心	基础网络	云网安全	云网运营系统
2021年4月-12月	新建约8.3万台服务器	新建约2.2万架数据中心机架	新增传输网络带宽约900T、CN2-DCI网络带宽约9T	新增抗DDoS清洗能力约3,500G；新建安全能力池约110个	基本建成水平分层的数字化云网运营平台，实现云网资源数字孪生、云网能力开放共享
2022年	新建约10.2万台服务器	新增约2.8万架数据中心机架	新增传输网络带宽约1,000T、CN2-DCI网络带宽约17T	新增抗DDoS清洗能力约2,600G；新建安全能力池约120个	
2023年	新建约12.3万台服务器	新增约3.6万架数据中心机架	新增传输网络带宽约1,100T、CN2-DCI网络带宽约23T	新增抗DDoS清洗能力约2,600G；新建安全能力池约130个	

Source: Company data, CMBIS

Figure 11: China Telecom targets to spend RMB9bn to enhance cloud platform services

具体投资及用途		投资金额（亿元）
1	自研云能力平台	90
2	云网融合运营系统	30
3	云网安全能力平台	30
4	5G 边缘服务	60
5	数字化服务平台	60
6	前沿技术	30
合计		300

计划进度	研发内容	
2021 年 4 月-12 月	1	完成天翼云 IaaS 平台重构，实现对多 AZ、单集群 5,000+ 台服务器、异构计算的支持，并提供软硬一体的高性能裸金属等产品，推出与公有云同源架构的私有云/混合云平台，软件定义的 SD-WAN 产品与云专线、云专网等产品融合并升级，提供 Underlay+Overlay 的企业云网服务
	2	实现混合多云的云管，以及解耦 5GC 等网元的高性能虚拟化
	3	丰富 PaaS 平台产品能力，提供多种云中间件产品，推出自研数据库，并实现容器化、可视化部署，完善企业应用开发平台
	4	打造基于 Hadoop 开源版本的自主掌控、技术领先、稳定安全的大数据和 AI 平台，提供集算力、算法、数据一体化的普惠 AI 和大数据服务
2022 年	1	天翼云 IaaS 平台基于统一技术栈内核，实现从轻量化边缘云到超大规模云平台的统一管理，并推出基于自研硬件的弹性裸金属产品以及深度定制服务器，全面提升天翼云基础云网产品的性能和性价比
	2	基于云网融合统一的产品设计和云网双向开放能力实现入云、云间、云内多种云网服务的统一编排调度
	3	PaaS 平台升级，推出云原生数据库，企业应用开发平台全面支持应用系统模块化可视化编程
	4	取得智能集群治理、一站式开发功能、运维自动化、基于安全多方计算的大数据能力
2023 年	1	天翼云 IaaS 平台不断升级突破，具备单集群万台服务器资源调度能力，自研定制服务器全面推广
	2	CDN 与大视频、云终端、企业云网等云网产品技术能力达到业内一流并构建云网边缘协同的差异化优势
	3	PaaS 平台产品极大丰富，覆盖范围包括开源数据库、自研数据库、缓存、消息队列等各种中间件，掌握云原生数据库超高可靠性、超高性能的核心技术，支撑在金融等重点行业关键系统的应用
	4	取得智慧城市级大数据和 AI 平台能力，取得大规模视频并行分析能力

Source: Company data, CMBIS

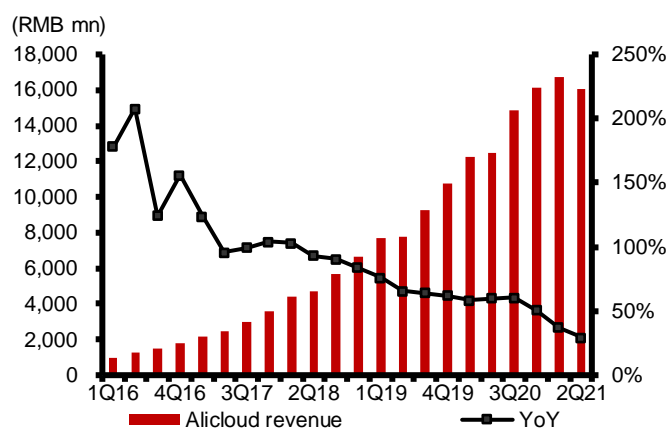
Alibaba/ Tencent face tougher competition

We are concerned that internet cloud service providers would slow capex/ ramp up IDC usage in the short term amid intensifying competition and regulatory headwinds. AliCloud 2Q21 revenue only grew at +29% YoY (vs. +37% YoY in 1Q21). Also, AliCloud and Tencent Cloud lost a total of 3.2% market share in China IaaS + PaaS market in 1Q21, according to IDC.

AliCloud 2Q21 revenue growth slowed to +29% YoY

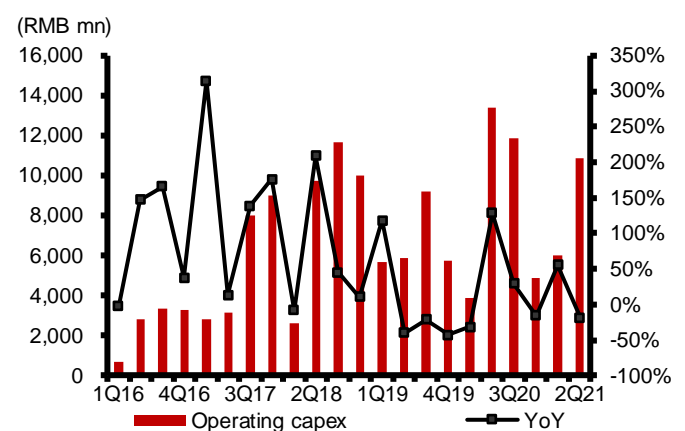
Alibaba 2Q21 cloud revenue growth was mere +29% YoY, compared to +37% YoY in 1Q21 or +60% YoY in 1Q20. Management attributed the growth slowdown to revenue decline from a top cloud customer (ByteDance in our view) which has stopped using Alibaba overseas cloud service due to local regulatory requirements. Excluding this impact, Alibaba revenue growth could be close to +40% YoY.

Figure 12: Alibaba cloud revenue



Source: Company data, CMBIS

Figure 13: Alibaba operating capex

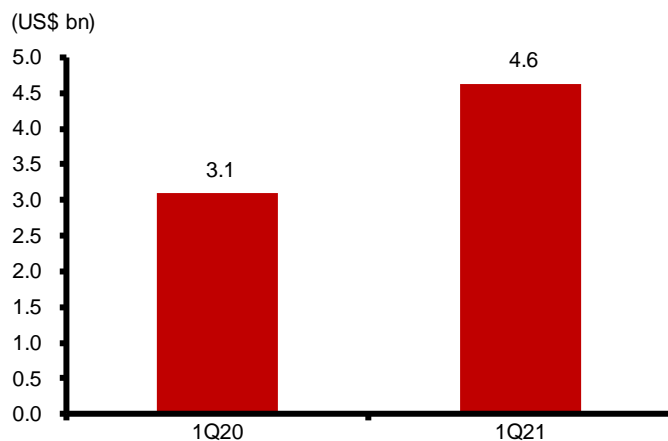


Source: Company data, CMBIS

AliCloud/ Tencent lost cloud market share in 1Q21

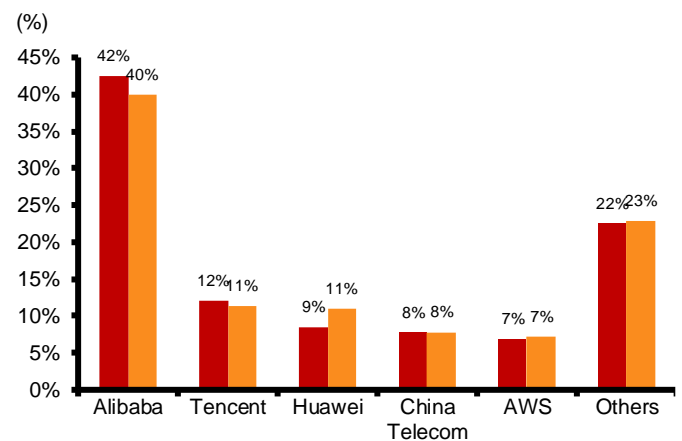
China IaaS + PaaS market size was US\$4.6bn in 1Q21, up 49% YoY, according to IDC. AliCloud/ Tencent Cloud experienced market share loss in 1Q21 to 39.9%/ 11.4% respectively while Huawei gained market share from 8.5% in 1Q20 to 10.9% in 1Q21. We believe the market share loss is related to the crackdown across internet sector.

Figure 14: China IaaS + PaaS market (1Q21)



Source: IDC, CMBIS

Figure 15: China IaaS + PaaS market share (1Q21)



Source: IDC, CMBIS

Beijing tightened data center policy regarding energy usage

Beijing released "[Notice on strengthening data center energy review](#)" ("Notice") 《关于印发进一步加强数据中心项目节能审查若干规定的通知》 on 22 July that further tightened data center energy usage.

Tightening PUE requirement

In the newly issued Notice, Beijing defined clearly the PUE level with respect to annual standard coal consumption range. The most stringent PUE level is set at 1.15 for annual consumption at >30,000 tonnes standard coal. This is tighter than the level set in 2018 (Beijing required newly-built data centers to have a PUE value at below 1.4). PUE (Power Usage Effectiveness) is the ratio of total amount of energy used by a computer data center facility to the energy delivered to computing equipment. An ideal PUE is 1.0.

Figure 16: tightening PUE requirement

Annual standard coal consumption (tonnes)	PUE
<10,000	<1.3
10,000 - 20,000	1.25
20,000 – 30,000	1.2
>30,000	1.15

Source: BMCDR, CMBIS

Additional electricity charge if PUE requirement is not met

Additional electricity charge will be applied to data centers that do not meet the new PUE requirement. According to the Notice, additional charge is up to RMB0.5 per kWh for PUE >1.8. Assuming annual consumption of 50,000 kWh per data center, data center operator will need to bear extra electricity cost of RMB2mn per year.

Figure 17: Additional electricity charge applied to data centers not meeting PUE requirement

PUE	Additional charge on electricity fee	Extra electricity cost per year, assuming annual consumption of 50,000 kWh
1.4 < PUE < 1.8	RMB0.2 per kWh	RMB1mn
PUE >1.8	RMB0.5 per kWh	RMB2mn

Source: BMCDR, CMBIS

Establishing online energy consumption monitoring system

According to the Notice, projects with annual energy consumption exceeding 5,000 tonnes of standard coal should set up online energy consumption monitoring system. At the same time, such system should be connected with Beijing energy consumption monitoring service platform (北京市节能监测服务平台).

Chinasoft (354 HK, BUY, TP: HK\$18.45)

Earnings revision

Figure 18: Earnings revision

RMB mn	2021E			2022E			2023E		
	New	Old	%Diff	New	Old	%Diff	New	Old	%Diff
Sales	18,068	17,905	1%	21,825	21,197	3%	25,369	24,069	5%
Gross profit	5,349	5,301	1%	6,523	6,304	3%	7,587	7,177	6%
OP Profit	1,306	1,278	2%	1,741	1,545	13%	1,966	1,779	11%
PBT	1,297	1,269	2%	1,725	1,529	13%	1,983	1,796	10%
Net profit	1,215	1,189	2%	1,616	1,433	13%	1,847	1,673	10%
EPS (RMB)	0.41	0.40	2%	0.54	0.48	13%	0.62	0.56	10%
Margins									
GM	29.6%	29.6%	0 bps	29.9%	29.7%	15 bps	29.9%	29.8%	9 bps
OPM	7.2%	7.1%	9 bps	8.0%	7.3%	68 bps	7.8%	7.4%	36 bps
PBT margin	7.2%	7.1%	9 bps	7.9%	7.2%	69 bps	7.8%	7.5%	36 bps
Net margin	6.7%	6.6%	8 bps	7.4%	6.8%	64 bps	7.3%	7.0%	33 bps

Source: Company data, CMBIS estimates

Figure 19: CMBIS estimates vs consensus

RMB mn	2021E			2022E			2023E		
	CMBI	Street	Diff	CMBI	Street	Diff	CMBI	Street	Diff
Sales	18,068	17,666	2%	21,825	21,624	1%	25,369	25,663	-1%
Gross profit	5,349	5,308	1%	6,523	6,559	-1%	7,587	7,864	-4%
OP Profit	1,306	1,428	-9%	1,741	1,821	-4%	1,966	2,286	-14%
PBT	1,297	1,366	-5%	1,725	1,752	-2%	1,983	2,190	-9%
Net profit	1,215	1,255	-3%	1,616	1,621	-0%	1,847	2,065	-11%
EPS (RMB)	0.41	0.42	-2%	0.54	0.53	2%	0.62	0.65	-4%
Margins									
GM	29.6%	30.0%	-44 bps	29.9%	30.3%	-44 bps	29.9%	30.6%	-74 bps
OPM	7.2%	8.1%	-85 bps	8.0%	8.4%	-45 bps	7.8%	8.9%	-116 bps
PBT margin	7.2%	7.7%	-55 bps	7.9%	8.1%	-20 bps	7.8%	8.5%	-71 bps
Net margin	6.7%	7.1%	-38 bps	7.4%	7.5%	-9 bps	7.3%	8.0%	-77 bps

Source: Company data, CMBIS estimates

Valuation

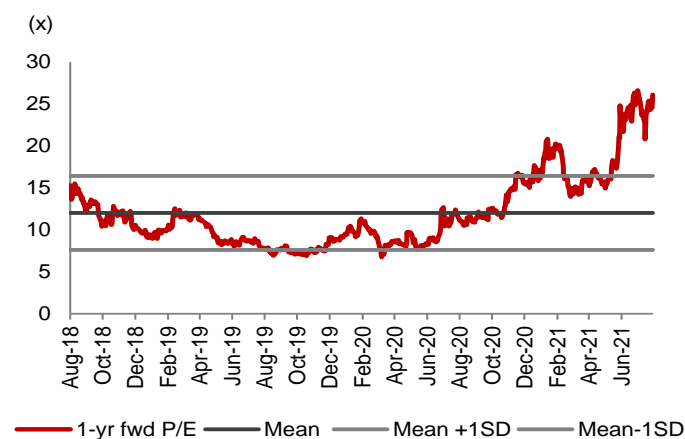
We have BUY rating on Chinasoft with target price of HK\$18.45, based on higher 30x FY22E P/E (prior 22x). We believe Chinasoft deserves re-rating given accelerating growth with Huawei and improving margins.

Figure 20: Peers' valuation

Company	Ticker	Rating	Mk Cap (US\$ mn)	Price (LC)	TP (LC)	P/E		ROE		Sales CAGR FY20-23	EPS CAGR FY20-23	
						FY21E	FY22E	FY21E	FY22E			
Chinasoft	354 HK	BUY	5,884	15.38	18.45	33.2	25.0	13.0	15.1	22%	25%	
Digital China	000034 CH	NR	1,755	17.24	N/A	14.4	11.1	14.8	16.3	9%	25%	
Infosys	INFO IN	NR	95,865	1674.80	N/A	36.5	32.1	28.4	28.9	13%	15%	
Tata Consultancy	TCS IN	NR	166,945	3358.95	N/A	38.0	31.7	38.0	41.6	10%	11%	
						Mean	29.6	25.0	27.1	29.0	11%	17%
						Median	25.7	36.5	31.7	28.4	28.9	10%

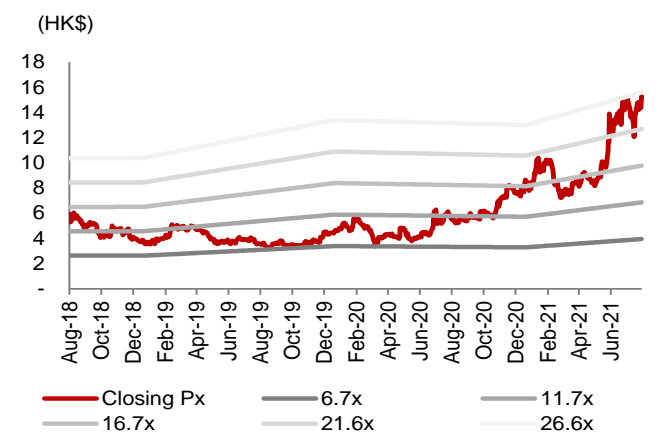
Source: Bloomberg, CMBIS

Figure 21: 12M forward P/E chart



Source: Bloomberg, CMBIS estimates

Figure 22: 12M forward P/E band



Source: Bloomberg, CMBIS estimates

Operating model

Figure 23: Operating model

RMB mn	2019	2020	2021E	2022E	2023E
Revenues	12,042	14,101	18,068	21,825	25,369
Cost of sales	(8,459)	(9,983)	(12,719)	(15,301)	(17,782)
Gross Profit	3,583	4,118	5,349	6,523	7,587
<i>Gross margin</i>	<i>29.8%</i>	<i>29.2%</i>	<i>29.6%</i>	<i>29.9%</i>	<i>29.9%</i>
R&D	(809)	(930)	(1,368)	(1,641)	(1,927)
SG&A	(1,813)	(2,031)	(2,633)	(3,101)	(3,654)
Operating Income	827	952	1,306	1,741	1,966
<i>Operating margin</i>	<i>6.9%</i>	<i>6.7%</i>	<i>7.2%</i>	<i>8.0%</i>	<i>7.8%</i>
Non-Operating Income	(28)	83	(9)	(16)	17
Profit Before Tax	799	1,035	1,297	1,725	1,983
Income tax (expense) gain	(42)	(87)	(84)	(114)	(141)
Minorities	2	(7)	(2)	(6)	(5)
Net Income to Shareholders	755	955	1,215	1,616	1,847
<i>Net margin</i>	<i>6.3%</i>	<i>6.8%</i>	<i>6.7%</i>	<i>7.4%</i>	<i>7.3%</i>
EPS (RMB)	0.31	0.33	0.41	0.54	0.62
Fully diluted EPS (RMB)	0.28	0.32	0.41	0.54	0.62
Revenue breakdown					
IT outsourcing	10,042	10,830	12,833	14,758	16,677
Emerging cloud business	2,000	3,271	5,234	7,066	8,692
Huawei	6,570	8,030	9,664	11,113	12,558
HSBC	880	830	872	872	872
Tencent	350	500	725	979	1,175
Alibaba	260	400	620	868	1,128
Ping An	300	450	698	977	1,172
Others	3,682	3,891	5,490	7,017	8,465
Growth YoY					
Revenues	14%	17%	28%	21%	16%
Gross profit	10%	15%	30%	22%	16%
Operating Income	1%	15%	37%	33%	13%
EPS	4%	7%	25%	31%	14%

Source: Company data, CMBIS estimates

Figure 24: Semi-annual operating model

RMB mn	1H19	2H19	1H20	2H20	1H21E	2H21E
Revenues	5,538	6,504	6,059	8,042	7,935	10,133
Gross Profit	1,567	2,016	1,649	2,469	2,222	3,127
Operating profit	426	401	421	531	617	689
Net profit (loss)	363	392	401	554	561	654
EPS (RMB)	0.15	0.16	0.16	0.19	0.19	0.22
Margins						
Gross margin	28.3%	31.0%	27.2%	30.7%	28.0%	30.9%
Operating margin	7.7%	6.2%	6.9%	6.6%	7.8%	6.8%
Net margin	6.5%	6.0%	6.6%	6.9%	7.1%	6.5%
Growth (HoH)						
Revenues	-4%	17%	-7%	33%	-1%	28%
Gross Profit	-16%	29%	-18%	50%	-10%	41%
Operating profit	14%	-6%	5%	26%	16%	12%
Net profit (loss)	2%	8%	2%	38%	1%	16%
Growth (YoY)						
Revenues	15%	13%	9%	24%	31%	26%
Gross Profit	13%	9%	5%	22%	35%	27%
Operating profit	-3%	7%	-1%	32%	47%	30%
Net profit (loss)	1%	10%	11%	41%	40%	18%

Source: Company data, CMBIS estimates

GDS (GDS US, TP: US\$81.20 / 9698 HK, TP: HK\$78.63, BUY)

Valuation

We maintain our BUY recommendation on GDS with new target price of US\$81.20/HK\$78.63, based on lowered 25x FY22E adj. EV/EBITDA (prior 30x), in-line with its 3-year mean as the long term trend that China is increasing cloud investment growth remains unchanged. We use a lower target multiple to reflect increasing uncertainty in customers investment/ ramp up schedule if internet sector crackdown in China continues.

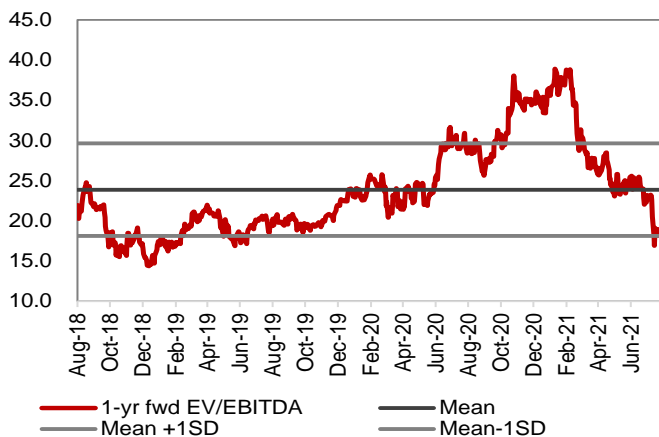
We use EV/EBITDA as the valuation methodology as it better reflects IDC operating profitability than P/E given high depreciation expense during ramp-up stage and large interest expense gap between peers if capital structure is different.

Figure 25: Peers' valuation

Company	Ticker	Rating	Market Cap (US\$ mn)	Price (LC)	TP (LC)	EV/EBITDA (x)		EBITDA margin (%)		Revenue FY20-23E CAGR
						FY21E	FY22E	FY21E	FY22E	
GDS	GDS US	BUY	10,999	58.85	81.20	23.8	19.8	47%	48%	33%
21Vianet	VNET US	NR	2,607	18.91	N/A	8.5	6.0	28%	31%	27%
Sinnet	300383 CH	NR	3,785	15.91	N/A	14.1	12.1	22%	22%	13%
Baosight	600845 CH	NR	13,028	67.47	N/A	37.0	28.0	18%	18%	30%
AtHub	603881 CH	NR	1,701	33.52	N/A	18.1	13.0	60%	61%	37%
ChinData	CD US	NR	4,434	12.14	N/A	20.2	14.5	47%	46%	78%
Equinix	EQIX US	NR	71,618	797.97	N/A	26.7	24.4	47%	48%	12%
Digital Realty Trust	DLR US	NR	44,713	154.37	N/A	25.0	23.3	54%	54%	17%
					Mean	21.5	17.2	40%	41%	31%
					Median	21.3	15.5	47%	46%	28%

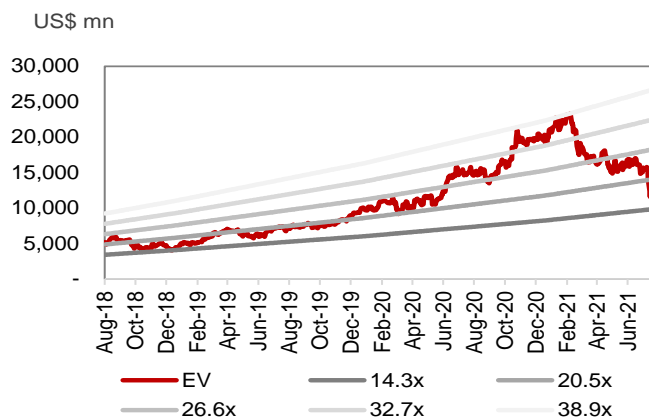
Source: Bloomberg, CMBIS

Figure 26: GDS US 12M forward EV/EBITDA chart



Source: Bloomberg, CMBIS

Figure 27: GDS US 12M forward EV/EBITDA band



Source: Bloomberg, CMBIS

Operating model

Figure 28: Operating model

RMB mn	2019	2020	2021E	2022E	2023E
Revenues	4,122	5,739	7,829	10,358	13,512
Service Revenue	4,095	5,717	7,807	10,337	13,490
Equipment Revenue	28	22	22	21	23
Cost of sales	-3,080	-4,189	-5,821	-7,365	-9,135
Gross Profit	1,043	1,550	2,008	2,993	4,378
<i>Gross margin</i>	<i>25.3%</i>	<i>27.0%</i>	<i>25.7%</i>	<i>28.9%</i>	<i>32.4%</i>
R&D	-22	-40	-50	-66	-85
SG&A	-541	-837	-1,120	-1,378	-1,789
Operating Income	480	673	838	1,549	2,505
Adj. EBITDA	1,824	2,681	3,696	4,933	6,481
<i>Adj. EBITDA margin</i>	<i>44.2%</i>	<i>46.7%</i>	<i>47.2%</i>	<i>47.6%</i>	<i>48.0%</i>
Interest Expense	-969	-1,287	-1,625	-2,036	-2,355
Net other income (exp)	62	66	70	70	70
Profit Before Income Taxes	-426	-548	-717	-417	220
Income Tax Expense	-16	-121	-123	-83	40
Net profit (loss)	-500	-738	-891	-551	209
<i>Net margin</i>	<i>-10.7%</i>	<i>-11.7%</i>	<i>-10.7%</i>	<i>-4.8%</i>	<i>1.9%</i>
EPS (RMB)	-0.45	-0.59	-0.71	-0.44	0.17
Key assumptions					
Total area in service (EoP)	225,963	318,272	464,509	641,023	881,327
Total area utilized (EoP)	156,020	226,212	325,396	455,815	626,796
Utilization rate (area utilized/ area in service)	69%	72%	71%	71%	71%
Average MSR (RMB / Sq m / Month)	2,532	2,403	2,281	2,165	2,052
Depreciation	1,142	1,638	2,346	2,942	3,479
Growth (YoY)					
Revenues	48%	39%	36%	32%	30%
Gross Profit	68%	49%	30%	49%	46%
Adj. EBITDA	74%	47%	38%	33%	31%
Net profit (loss)	3%	51%	26%	-40%	-152%

Source: Company data, CMBIS estimates

Figure 29: Quarterly model

RMB mn	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21E	3Q21E	4Q21E
Revenues	1,240	1,342	1,525	1,632	1,706	1,826	2,042	2,255
Gross Profit	350	361	409	430	397	466	528	617
Adj. EBITDA	572	633	717	758	818	872	958	1,048
Net profit (loss)	-105	-114	-224	-294	-301	-218	-202	-211
EPS (RMB)	-0.09	-0.10	-0.18	-0.21	-0.21	-0.15	-0.14	-0.15
Key assumptions								
Total area in service (EoP)	229,986	266,260	279,618	318,272	332,534	375,541	442,706	464,509
Total area utilized (EoP)	163,835	193,163	209,751	226,212	242,364	263,058	309,891	325,396
Utilization rate (area utilized/ area in service)	71%	73%	75%	71%	73%	70%	70%	70%
Average MSR (RMB / Sq.m / Month)	2,569	2,492	2,519	2,489	2,425	2,400	2,368	2,359
Depreciation	319	390	451	478	560	543	596	647
Margins								
Gross margin	28%	27%	27%	26%	23%	26%	26%	27%
Adj. EBITDA margin	46%	47%	47%	46%	48%	48%	47%	46%
Net margin	-8%	-9%	-15%	-18%	-18%	-12%	-10%	-9%
Growth (QoQ)								
Revenues	5%	8%	14%	7%	5%	7%	12%	10%
Gross Profit	19%	3%	13%	5%	-8%	18%	13%	17%
Adj. EBITDA	8%	11%	13%	6%	8%	7%	10%	9%
Net profit (loss)	-10%	9%	95%	31%	2%	-28%	-7%	4%
Growth (YoY)								
Revenues	38%	35%	44%	40%	38%	36%	34%	38%
Gross Profit	65%	38%	49%	46%	13%	29%	29%	43%
Adj. EBITDA	49%	48%	48%	43%	43%	38%	34%	38%
Net profit (loss)	33%	-8%	-88%	-162%	-203%	-93%	13%	31%

Source: Company data, CMBIS estimates

Financial Summary - Chinasoft (354 HK)

Income statement						Cash flow summary					
YE 31 Dec (RMB mn)	FY19A	FY20A	FY21E	FY22E	FY23E	YE 31 Dec (RMB mn)	FY19	FY20	FY21E	FY22E	FY23E
Revenue	12,042	14,101	18,068	21,825	25,369	Net profit	799	1,035	1,297	1,725	1,983
Cost of sales	(8,459)	(9,983)	(12,719)	(15,301)	(17,782)	Depreciation/amortization	197	170	100	104	108
Gross profit	3,583	4,118	5,349	6,523	7,587	Change in working capital	(516)	(533)	421	(406)	(657)
Selling exp	(618)	(729)	(916)	(1,048)	(1,218)	Others	274	480	(84)	(114)	(141)
Admin exp	(1,196)	(1,302)	(1,717)	(2,054)	(2,437)	Net cash from operating	754	1,153	1,734	1,308	1,294
R&D exp	(809)	(930)	(1,368)	(1,641)	(1,927)	Capex	(105)	(159)	(150)	(150)	(150)
Other operating exp.	(134)	(205)	(42)	(40)	(39)	Others	(120)	(32)	(42)	(40)	(39)
Operating profit	827	952	1,306	1,741	1,966	Net cash from investing	(224)	(192)	(192)	(190)	(189)
Finance costs	(166)	(151)	(155)	(199)	(213)	Net borrowings	52	217	1,414	233	360
Other non-oper exp.	138	235	146	183	230	Dividend paid	0	0	(73)	(97)	(111)
Pre-tax profit	799	1,035	1,297	1,725	1,983	Others	(701)	145	2	6	5
Income tax expense	(42)	(87)	(84)	(114)	(141)	Net cash from financing	(650)	362	1,343	142	254
Minority interests	2	(7)	(2)	(6)	(5)	Net change in cash	(119)	1,323	2,885	1,260	1,359
Net profit to shareholders	755	955	1,215	1,616	1,847	Cash at beginning of the year	2,646	2,526	3,787	6,737	8,037
						Exchange difference	(1)	(62)	65	40	39
						Cash at the end of the year	2,526	3,787	6,737	8,037	9,434

Balance sheet						Key ratios					
YE 31 Dec (RMB mn)	FY19	FY20	FY21E	FY22E	FY23E	YE 31 Dec	FY19	FY20	FY21E	FY22E	FY23E
Current assets	8,198	10,394	13,315	15,555	18,181	Revenue mix					
Cash & equivalents	2,526	3,787	6,737	8,037	9,434	Emerging cloud business	15%	17%	23%	29%	32%
Account receivables	3,297	4,580	3,704	4,100	4,744	Traditional IT outsourcing	85%	83%	77%	71%	68%
Amount due from customers	2,228	1,904	2,687	3,210	3,769	Growth (%)					
Other current assets	147	123	187	209	233	Revenue	14%	17%	28%	21%	16%
Non-current assets	2,547	2,693	2,720	2,766	2,808	Gross profit	10%	15%	30%	22%	16%
PPE	802	858	927	1,013	1,093	Operating profit	1%	15%	37%	33%	13%
Intangible assets	1,101	1,086	1,044	1,004	965	Net profit	5%	26%	27%	33%	14%
Other non-current assets	643	749	749	749	749	Profit & loss ratio (%)					
Total assets	10,745	13,087	16,035	18,321	20,988	Gross margin	29.8%	29.2%	29.6%	29.9%	29.9%
Current liabilities	3,150	2,718	4,609	5,279	6,059	Operating margin	6.9%	6.7%	7.2%	8.0%	7.8%
ST borrowings	1,523	368	1,867	2,002	2,212	Net profit margin	6.3%	6.8%	6.7%	7.4%	7.3%
Account payables	1,229	1,753	2,687	3,210	3,769	Balance sheet ratio					
Accrued expense	106	117	0	0	0	Receivable turnover days	99	117	74	68	67
Other current liabilities	291	480	56	67	78	Amount due days	67	49	54	53	53
Non-current liabilities	1,062	1,592	1,508	1,605	1,755	Payable turnover days	52	63	76	76	76
LT borrowings	928	1,421	1,337	1,434	1,584	Current ratio (x)	2.60	3.82	2.89	2.95	3.00
Other non-current liabilities	134	171	171	171	171	Net debt to equity	net cash	net cash	net cash	net cash	net cash
Total liabilities	4,211	4,311	6,117	6,884	7,814	Profitability (%)					
Share capital	116	132	132	132	132	ROE	12.0%	12.5%	13.0%	15.1%	15.0%
Capital surplus	3,145	4,735	4,735	4,735	4,735	ROIC	12.9%	13.5%	19.0%	25.2%	26.0%
Retained earnings	3,677	4,492	5,634	7,153	8,890	Per share data (RMB)					
Other reserves	-471	-605	-605	-605	-605	EPS (RMB)	0.28	0.32	0.41	0.54	0.62
Minority interest	66	23	23	23	23	DPS (RMB)	0.02	0.03	0.02	0.03	0.04
Total equity	6,534	8,776	9,919	11,438	13,174	BVPS (RMB)	2.45	2.93	3.31	3.82	4.40
Total liabilities and equity	10,745	13,087	16,035	18,321	20,988						

Source: Company data, CMBIS estimates

Financial Summary – GDS (GDS US/ 9698 HK)

Income statement						Cash flow summary					
YE 31 Dec (RMB mn)	FY19A	FY20A	FY21E	FY22E	FY23E	YE 31 Dec (RMB mn)	FY19A	FY20A	FY21E	FY22E	FY23E
Revenues						Net Income	(442)	(669)	(840)	(500)	260
Service Revenue	4,095	5,717	7,807	10,337	13,490	Depreciation & Amortization	1,142	1,638	2,346	2,942	3,479
Equipment Revenue	28	22	22	21	23	Net change in WC	(653)	(1,023)	98	761	749
Total Revenue	4,122	5,739	7,829	10,358	13,512	Others	247	375	131	0	0
Cost of sales	(3,080)	(4,189)	(5,821)	(7,365)	(9,135)	Net cash from operating	293	321	1,735	3,203	4,489
Gross Profit	1,043	1,550	2,008	2,993	4,378	Capital Expenditures	(4,553)	(8,021)	(9,761)	(7,924)	(6,891)
R&D Expenditures	(22)	(40)	(50)	(66)	(85)	Acquisition of Business	(579)	(1,357)	(1,354)	(1,398)	(1,216)
Sales/Marketing/Ad Exp.	(130)	(135)	(164)	(195)	(271)	Other Investing Activities	0	0	(2,904)	(3,485)	(3,136)
G&A Expenses	(411)	(703)	(956)	(1,183)	(1,518)	Net cash from investing	(5,131)	(9,378)	(14,019)	(12,807)	(11,244)
Operating Income	480	673	838	1,549	2,505	Equity raised	4,934	12,724	0	0	0
Adj. EBITDA	1,824	2,681	3,696	4,933	6,481	Change of debts	3,730	790	5,085	7,074	4,212
Interest Expense	(969)	(1,287)	(1,625)	(2,036)	(2,355)	Dividend paid	(25)	0	0	0	0
Other non-oper. income	62	66	70	70	70	Others	(277)	6,630	333	0	114
Profit Before Income Taxes	(426)	(548)	(717)	(417)	220	Net cash from financing	8,362	20,144	5,418	7,074	4,326
Income Tax Expense	(16)	(121)	(123)	(83)	40	Net change in cash	3,524	11,087	(6,867)	(2,531)	(2,429)
Net Profit (loss)	(442)	(669)	(840)	(500)	260	Cash at beg. of the year	2,162	5,811	16,259	9,441	6,910
Non-controlling interests	(58)	(69)	(51)	(51)	(51)	Ex. difference and others	125	(638)	48	0	0
Net Profit (loss) to shr holders	(500)	(738)	(891)	(551)	209	Cash at the end of the year	5,811	16,259	9,441	6,910	4,481

Balance sheet						Key ratios					
YE 31 Dec (RMB mn)	FY19A	FY20A	FY21E	FY22E	FY23E	YE 31 Dec	FY19A	FY20A	FY21E	FY22E	FY23E
Non-current assets	24,408	38,940	50,890	60,756	68,520	Key operating ratios					
PPE - Net	19,185	29,596	39,831	48,298	54,847	Total area in service ('000 sqm)	226	318	465	641	881
Other Intangible Assets	2,300	3,382	4,674	6,072	7,289	Avg. UTR	69%	72%	71%	71%	71%
Other noncurrent assets	2,923	5,962	6,385	6,385	6,385	Avg. MSR (RMB/ sqm/ Month)	2,532	2,403	2,281	2,165	2,052
Current assets	7,085	18,319	12,598	10,875	9,464	Growth (YoY)					
Cash and Equivalents	5,811	16,259	9,441	6,910	4,481	Revenue	48%	39%	36%	32%	30%
A/R - Trade	880	1,480	2,157	2,824	3,686	Gross profit	68%	49%	30%	49%	46%
Other current assets	394	579	1,000	1,141	1,297	EBITDA	74%	47%	38%	33%	31%
Current liabilities	4,000	7,644	9,551	12,273	14,728	Net profit	n.a.	n.a.	n.a.	n.a.	-138%
Borrowings	1,138	2,153	2,903	4,056	4,743	Margins					
AP - Trade	1,676	3,657	4,381	5,456	6,688	Gross margin	25%	27%	26%	29%	32%
Accrued Expenses	818	1,493	1,831	2,324	2,856	Operating margin	12%	12%	11%	15%	19%
Other non-current liab.	368	341	437	437	441	EBITDA margin	44%	47%	47%	48%	48%
Non-current liabilities	16,137	22,947	27,919	33,839	37,479	Balance sheet ratio					
Borrowings	8,028	10,567	14,902	20,822	24,347	Net debt / equity ratio (%)	0.5	net	0.4	0.8	1.1
Convertible bonds	2,050	1,928	1,945	1,945	1,945	Current ratio	1.8	2.4	1.3	0.9	0.6
Others	6,059	10,452	11,072	11,072	11,186	Returns (%)					
Total mezzanine equity	1,062	1,102	1,175	1,175	1,175	ROE	n.a.	n.a.	n.a.	n.a.	0.01
Share capital	0	1	1	1	1	ROA	n.a.	n.a.	n.a.	n.a.	0.00
Capital surplus	12,403	28,729	28,817	28,817	28,817	Per share					
Retained earnings	-2,057	-2,724	-3,562	-4,062	-3,802	EPS (RMB)	-0.45	-0.59	-0.71	-0.44	0.17
Other reserves	-53	-440	-414	-414	-414	BVPS (RMB)	9.3	20.4	19.8	19.4	19.6
Total equity	10,294	25,566	24,842	24,342	24,602						

Source: Company data, CMBIS estimates

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