26 June 2020

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ChinaSoft International (354 HK)

Buy: Driving new growth with cloud

Equities
IT Services

China

- Core operations have historically focused on IT outsourcing solutions, with a targeted approach on high-quality customers
- We see upside growth potential from expansion into new business segments, such as cloud and big data
- Maintain Buy; lower PE-based TP to HKD5.40 from HKD5.59, based on a 13.7x 2020e PE (vs a 14.7x 2019 PE)

ChinaSoft International (CSI) provides customised technical and professional IT services to large corporates and is expanding into cloud services.

Introducing CIG: CIG (Cloud Intelligence Group) is CSI's newly formed cloud business division designed to boost R&D in cloud products, developer services and cloud-native applications. Despite only beginning in 2019, CIG accounted for c15% of total revenues that year, and we forecast this will rise to 33% by 2022e.

Huawei exposure a double-edged sword: CSI's cloud business is software-as-a-service (SaaS), which relies largely on Huawei Cloud – one of the top-5 cloud services in China – as 55% of CSI's revenues in 2019 came from Huawei. Huawei's headwinds in the US are a business risk for CSI due to its high exposure, but at the same time we think an increased focus on domestically developed technology will create more opportunities for CSI. Furthermore, CSI's revenue derived from Huawei as a percentage of Huawei's total revenues and cost of sales in 2019 was only 0.8% and 1.2%, respectively; as such, CSI is only a small portion of Huawei's overall cost base.

Earnings estimate changes: We adjust our 2020-21e NPAT estimates up 1% and down 3%, respectively, after factoring in 2020 revenue and profit growth guidance whilst assuming mildly slower revenue growth in 2021e. Our 2020-22e reported EPS estimates are 5%, 1% and 1% above consensus, respectively. Though our estimates are not materially above consensus, we think recent concerns over Huawei are overdone, and we see valuation as the primary share price catalyst rather than consensus earnings estimate revisions.

Maintain Buy; lower target price to HKD5.40 (from HKD5.59): Our target price is based on a PE multiple (unchanged). We lower our target price to HKD5.40 from HKD5.59 based on a 13.7x 2020e PE (implies an 11.3x 2021e PE) vs our previous 14.7x 2019 PE on non-GAAP earnings. Our 13.7x PE target multiple is set at the average one-year forward PE CSI has traded at since 2015 to the present and is at a 40% discount to our DCF-calculated valuation. The shares are currently trading at 1.05x SD below the historical one-year forward PE since 2015.

With this report, Wei Sim assumes primary coverage of ChinaSoft International.

MAINTAIN BUY

TARGET PRICE (HKD)	PREVIOUS TARGET (HKD)
5.40	5.59
SHARE PRICE (HKD)	UPSIDE/DOWNSIDE
4.47	**+20.8%**

(as of 19 Jun 2020)

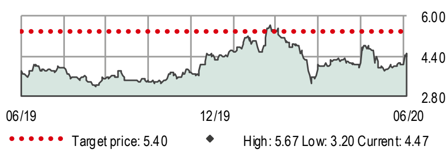
MARKET DATA

Market cap (HKDm)	11,732	Free float	85%
Market cap (USDm)	1,514	BBG	354 HK
3m ADTV (USDm)	11	RIC	0354.HK

FINANCIALS AND RATIOS (CNY)

Year to	12/2019a	12/2020e	12/2021e	12/2022e
HSBC EPS	0.30	0.36	0.44	0.52
HSBC EPS (prev)	0.31	0.34	0.43	NA
Change (%)	-4.0	4.5	1.4	NA
Consensus EPS	0.29	0.34	0.43	0.52
PE (x)	13.6	11.4	9.4	7.9
Dividend yield (%)	0.5	0.6	0.7	0.9
EV/EBITDA (x)	7.9	7.1	5.7	4.5
ROE (%)	12.9	13.9	14.8	15.3

52-WEEK PRICE (HKD)



Source: Refinitiv IBES, HSBC estimates

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Financials & valuation: ChinaSoft

Buy

Financial statements

Year to	12/2019a	12/2020e	12/2021e	12/2022e
Profit & loss summary (CNYm)				
Revenue	12,042	13,859	15,878	18,089
EBITDA	1,264	1,366	1,570	1,787
Depreciation & amortisation	-298	-273	-261	-251
Operating profit/EBIT	965	1,093	1,309	1,536
Net interest	-166	-124	-123	-123
PBT	799	969	1,186	1,412
HSBC PBT	799	969	1,186	1,412
Taxation	-42	-51	-62	-74
Net profit	755	916	1,121	1,335
HSBC net profit	801	958	1,163	1,378
Cash flow summary (CNYm)				
Cash flow from operations	62	765	1,110	1,279
Capex	-259	-240	-232	-226
Cash flow from investment	-259	-240	-232	-226
Dividends	-58	-67	-81	-97
Change in net debt	168	-351	-693	-855
FCF equity	-197	525	877	1,053
Balance sheet summary (CNYm)				
Intangible fixed assets	1,101	1,079	1,061	1,046
Tangible fixed assets	1,081	1,070	1,060	1,049
Current assets	8,198	9,145	10,417	11,903
Cash & others	2,526	2,877	3,570	4,425
Total assets	10,745	11,659	12,902	14,363
Operating liabilities	1,313	1,359	1,540	1,737
Gross debt	1,723	1,723	1,723	1,723
Net debt	-803	-1,153	-1,847	-2,702
Shareholders' funds	6,468	7,335	8,397	9,661
Invested capital	4,221	4,738	5,107	5,515

Ratio, growth and per share analysis

Year to	12/2019a	12/2020e	12/2021e	12/2022e
Y-o-y % change				
Revenue	13.8	15.1	14.6	13.9
EBITDA	19.5	8.1	15.0	13.8
Operating profit	11.4	13.2	19.8	17.3
PBT	5.1	21.2	22.4	19.1
HSBC EPS	7.7	19.6	21.4	18.5
Ratios (%)				
Revenue/IC (x)	3.3	3.1	3.2	3.4
ROIC	26.8	24.2	26.0	28.0
ROE	12.9	13.9	14.8	15.3
ROA	8.6	9.2	10.1	10.7
EBITDA margin	10.5	9.9	9.9	9.9
Operating profit margin	8.0	7.9	8.2	8.5
EBITDA/net interest (x)	7.6	11.0	12.8	14.5
Net debt/equity	-12.3	-15.6	-21.8	-27.8
Net debt/EBITDA (x)	-0.6	-0.8	-1.2	-1.5
CF from operations/net debt	-	-	-	-
Per share data (CNY)				
EPS Rep (diluted)	0.28	0.34	0.42	0.50
HSBC EPS (diluted)	0.30	0.36	0.44	0.52
DPS	0.02	0.03	0.03	0.04
Book value	2.43	2.75	3.15	3.62

Key forecast drivers

Year to	12/2019a	12/2020e	12/2021e	12/2022e
TPG revenue growth (%)	14	16	15	15
IIG revenue growth (%)	12	11	10	9
TPG segment margin (%)	9	9	9	9
IIG segment margin (%)	6	6	6	6

Valuation data

Year to	12/2019a	12/2020e	12/2021e	12/2022e
EV/sales	0.8	0.7	0.6	0.4
EV/EBITDA	7.9	7.1	5.7	4.5
EV/IC	2.4	2.0	1.8	1.5
PE*	13.6	11.4	9.4	7.9
PB	1.7	1.5	1.3	1.1
FCF yield (%)	-1.8	4.9	8.2	9.8
Dividend yield (%)	0.5	0.6	0.7	0.9

* Based on HSBC EPS (diluted)

ESG metrics

Environmental Indicators	12/2018a
GHG emission intensity*	8.6
Energy intensity*	173.1
CO_2 reduction policy	Yes
Social Indicators	**12/2018a**
Employee costs as % of revenues	NA
Employee turnover (%)	NA
Diversity policy	Yes

Governance Indicators	12/2019a
No. of board members	8
Average board tenure (years)	14.8
Female board members (%)	25
Board members independence (%)	37.5

Source: Company data, HSBC

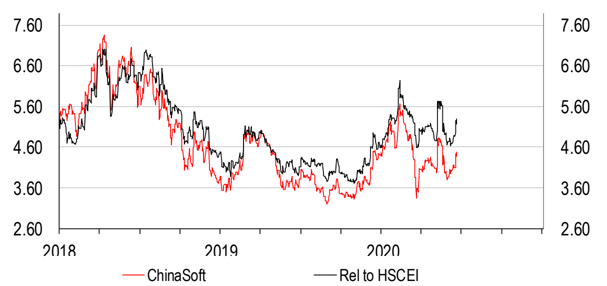
* GHG intensity and energy intensity are measured in kg and kWh respectively against revenue in USD '000s

Issuer information

Share price (HKD)	4.47
Target price (HKD)	5.40
RIC (Equity)	0354.HK
Bloomberg (Equity)	354 HK
Market cap (USDm)	1,514

Free float	85%
Sector	It Services
Country/Region	China
Analyst	Wei Sim
Contact	+852 2996 6602

Price relative



Source: HSBC

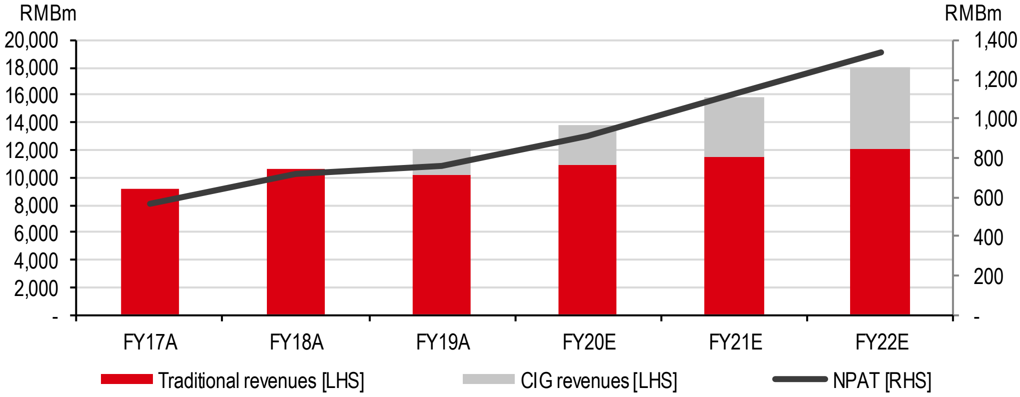
Note: Priced at close of 19 Jun 2020. We introduce 2022e estimates in this report.

Investment summary

ChinaSoft International (CSI) is an IT services company traditionally providing customised technical and professional services to large corporates. In 2019, the company formed its cloud business division CIG (Cloud Intelligence Group), which leverages the existing customer base.

Despite only beginning in 2019, CIG has already started to contribute c15% to the company's total revenue in 2019, and we forecast for this mix to increase to 33% by 2022e. We forecast a 2019-22e revenue CAGR of 15%, which is only slightly stronger than the historical 2017-19 revenue CAGR of 14%. However, as a result of the change in business mix to the increased contribution from CIG, we forecast NPAT's CAGR to increase to 21% in 2019-22e from 16% in 2017-19.

Fig 1: ChinaSoft International historical and future forecast revenue vs NPAT trend



Source: Company data, HSBC estimates

CSI's cloud business

CSI's cloud business is focused on software (see Fig. 2 for more details). The company focuses on SaaS across the public, hybrid and private cloud, providing services and scenario-based applications in financial, workplace, park, retail, and transportation industries, using a subscription model.

In terms of providing platform-as-a-service (PaaS), CSI has also built aPaaS (application-driven PaaS) to better support itself and the cloud ecosystem, as well as building cloud-native application service capabilities, such as DevOps and JointForce ADM (application development & maintenance).

At the infrastructure-as-a-service (IaaS) level, CSI's cloud infrastructure utilises third parties, including Huawei, Microsoft and Tencent.

Fig 2: CSI's cloud business model

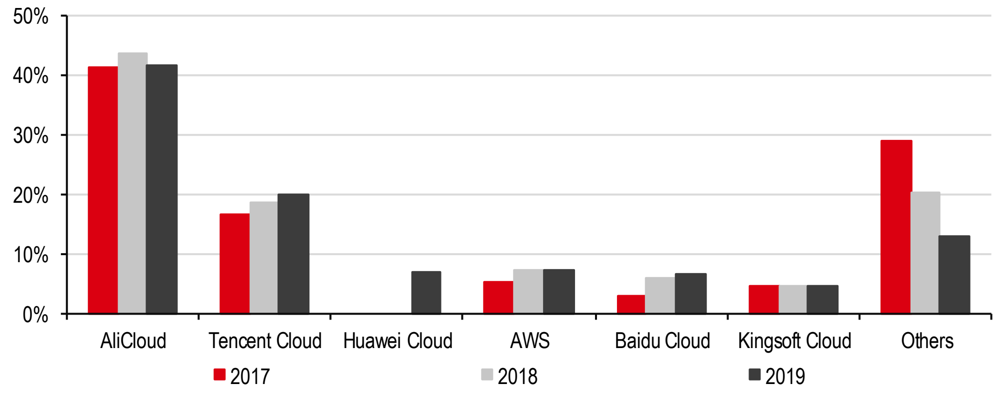
Layer	Provider	Description
SaaS	CSI	Public/Hybrid/Private "Cloud Integrative" services, scenario-based applications in financial, workplace, park, retail, and transportation
PaaS	CSI /third party	CSI (APaaS), cloud-native application service (e.g., DevOps and JointForce ADM)
IaaS	Third party	Huawei Kunpeng Cloud, Microsoft Azure, Tencent Cloud

Source: HSBC

China's cloud market share

CSI's cloud business is software-based (SaaS), which feeds largely off Huawei Cloud; the company has formed various strategic co-operations and participates in the construction of software around Kunpeng (Huawei's ARM-based server processor) and HMS (Huawei Mobile Services) ecosystems.

Fig 3: Market share of key firms in China's cloud market



Source: HSBC

In China, Alibaba (BABA US, USD223.54, Buy) makes up about a third of the market followed by Tencent (0700 HK, HKD460.4, Buy), China Telecom's e-Cloud (天翼云) (Not listed), AWS (Not listed) and Huawei (Not listed) taking second to fifth position. The top-5 firms have a combined 70-75% cloud market share in China in terms of infrastructure and platform.

Porter's five forces analysis

***Industry* rivalry:** IT services are fragmented in China. ChinaSoft International is one of the largest companies in the space, but the top few companies combined only make up c5% of the entire market; therefore, the space is competitive. According to the company, its largest competitor is **Neusoft (600718 CH, Not Rated)**. ChinaSoft's strategy is to focus on a few key customers, especially large corporates with a revenue contribution of more than USD100m.

CSI has recognised that market competition risk is increasing and set up a special operation group

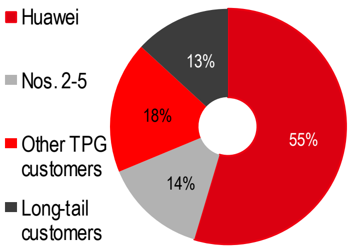
CSI has recognised that market competition risk is increasing. While striving to provide high quality products and services to customers, it advocates a spirit of innovation and a culture of creativity, setting up a special operation group known as Zero Distance Innovation, which seeks to rapidly upgrade products and service cycles.

Bargaining power of *suppliers*: CSI's main suppliers are IT hardware enterprises as the company's value generation is through software and IT services. According to CSI, the company has good relationship with its suppliers and conducts a fair and strict appraisal of its suppliers on an annual basis. CSI also grants share options to certain suppliers as part of an incentive scheme to align the priorities of suppliers with those of the company.

Huawei is the company's largest customer currently, making up over 50% of the revenue contribution

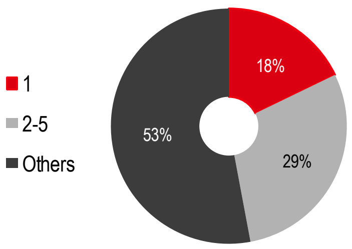
Bargaining power of *buyers*: As noted above, China's IT services sector is fragmented, and, as such, customers have good bargaining power. As per above, ChinaSoft's strategy has been to focus on fewer large customers and grow its IT services along with the growth of those customers; this is the company's TPG business (technical and professional services group). Huawei is the CSI's largest customer currently, making up over 50% of the revenue contribution. Beyond Huawei, other major customers include Tencent, Alibaba, Baidu, China Mobile (941 HK, HKD55.00, Buy), and Ping An (2318 HK, HKD79.15, Buy).

Fig 4: CSI 2019 customer contribution concentration breakdown (value)



Source: Company data, HSBC

Fig 5: CSI 2019 supply procurement concentration breakdown (value)



Source: Company data, HSBC

For CSI's smaller customers, most business is based on its JointForce platform, which is an online IT crowdsourcing platform that provides online transaction and software development management services, matching, coordinating and guaranteeing service providers (contracting companies) and engineers based on the platform to provide quality IT services to customers (outsourcing companies). JointForce is essentially a supply procurement platform for customers to find contractors. The bargaining is between contracting and outsourcing companies and CSI's JointForce platform acts an intermediary.

Threat of *substitutes*: Apart from new entrants or industry rivals, we do not see any substitutes for CSI's provision of IT services at this point in time.

CSI's strategy is to focus on a small number of large customers

Threat of *new entrants*: Given the fragmented nature of the IT services market, this threat is ever present. CSI minimises the risk by focusing on a small number of large customers. The loss of these large customers, however, would have a material negative impact on the company's business. CSI's largest customer is Huawei, which contributes over 50% to the company's revenue.

Huawei: CSI's major customer

Historically, CSI's relationship with Huawei has been like a second R&D centre. CSI collaborates with Huawei on everything from application development to maintenance, infrastructure operations and application operations. The evolution of the relationship started from just making communication equipment applications and software and maintaining those to a solutions business. For example, in Kenya, CSI and Huawei signed a contract with Vodafone (VOD LN, GBP1.25, Buy) to provide a mobile payments solution, which worked not just with smartphones but also with feature phones. Thereafter, CSI expanded its relationship with Huawei by working on cloud, cloud solutions, big data, consumer goods and testing.

CSI assists in building out Huawei's Kunpeng and HMS (Huawei Mobile Services) ecosystems

Recently, more prominent projects CSI is working on with Huawei include assisting in building out Huawei's Kunpeng and HMS (Huawei Mobile Services) ecosystems.

Kunpeng

Kunpeng is a family of Huawei's ARM-based server CPU architecture. The company signed the first Huawei Kunpeng Cloud Migration Framework Agreement, covering services, such as chips, servers, operating systems, databases, big data and cloud services, in 2019.

Fig 6: Huawei's all-scenario processor portfolio

Processor family	Scenario
Kunpeng	General-purpose computing
Ascend	AI computing
Kirin	Smart devices
Honghu	Smart screens

Source: Company data

Examples of Kunpeng projects include the Chongqing Kunpeng Industrial Ecosystem Project (CKIEP) signed in May 2020. CKIEP is a three-way strategic cooperation between CSI, Huawei and Chongqing Xiyong Microelectronics Industrial Park.

CSI migrates systems and software to the Kunpeng platform, accelerating the localisation of key industries

Leveraging JointForce, CSI provides comprehensive services, such as ecological operations, IT engineering, and personnel training, and works with Huawei to build Kunpeng ecological full-stack service capabilities to support the construction and development of Kunpeng's technological, industrial and market ecosystem.

Huawei Mobile Services

As a result of the US trade restrictions, Huawei hasn't been able to launch new phones with Google Mobile Services (GMS) since last year. GMS is a core element of most Android smartphones. It comprises dozens of apps, APIs, and cloud-based services, such as Google Maps, Google Drive, YouTube, Google Photos, Google Play Store, Google Chrome, and more.

Without GMS, Huawei phones not only miss out on Google products, they also lack a number of other popular apps, such as Facebook, WhatsApp and Instagram. Many smaller apps also depend on the infrastructure provided by Google through GMS. Huawei's solution to combat the lack of GMS is to create its own competing platform – Huawei Mobile Services (HMS) – which CSI is helping to build out. HMS has actually been around for years, but Huawei relaunched and expanded the platform.

HMS has a user-facing component (e.g., AppGallery and other Huawei apps and services) and a developer-facing component, called HMS Core. HMS Core is made up of various APIs, SDKs, and services that developers can use to create and improve apps.

HMS Core

A set of developer services from Huawei, including tools for location tracking, sign-ins, in-app purchases, ads, face detection and text recognition; CSI is helping to build this out.

CSI participated in 17 out of 24 R&D processes of HMS Core 4.0

Beyond building out the HMS ecosystem, CSI participated in 17 out of 24 R&D processes of HMS Core 4.0. In the future, CSI intends to continue providing services for Huawei's HMS upgrade and support the global ecological development of HMS.

Huawei CBG

In 2019, CSI joined the list of core IT suppliers for Huawei Consumer Business Group (CBG) and was named best supplier of Huawei's CBG IT annual framework. The "Co-sell" model of CSI and Huawei had a breakthrough in the Latin America region, adding New Mexico business. At the same time, CSI consolidated the South Asian and East Asian markets, and established overseas branches in Malaysia, Myanmar, India, and Hong Kong. In addition to traditional businesses, Huawei Cloud-based solutions have made breakthroughs in government, manufacturing, retail, and transportation industries.

HSBC estimates vs consensus

Our 2020e estimates for top- and bottom-line growth are in line with the company's guidance. CSI has guided to 15-20% y-o-y growth in revenue in 2020 and 20% y-o-y growth in profit in 2020. We estimate 15.1% growth in revenue in 2020 and 21.5% growth in profit in 2020. Our 2020e NPAT estimate is in line with consensus; however, our 2020e EPS estimate is above as we have assumed that there will be no dilution from the conversion of share options in 2020e. Conversion will depend on whether the share price reaches the conversion levels of HKD4.50 for options issued in 2017 and HKD5.22 for options issued in 2018, respectively.

Our 2021-22e revenue estimates are below consensus, driven by our estimate of milder top-line growth in the corresponding years. This is due to a slowdown in growth of the company's traditional business. Over the long-term CSI has guided for high single-digit to low double-digit growth for its traditional business. Within a fragmented market it is already a relatively large participant and, as such, we think it will grow slower than the overall market. We estimate the traditional business revenue growth to be 7%, 6% and 4% in 2020-22, respectively.

Our 2021-22e reported EPS estimates are, however, 1% above consensus as we estimate the slower top-line growth to be offset by margin expansion due to the new business mix from CIG.

Fig 7: HSBC new vs old estimates and consensus

	Actual	HSBC (new)			HSBC (old)		Consensus			New vs Old		HSBC vs Consensus		
RMBm, except EPS (RMB)	2019	2020	2021	2022	2020	2021	2020	2021	2022	2020	2021	2020	2021	2022
Revenue	12,042	13,859	15,878	18,089	14,021	16,396	14,166	16,768	19,600	-1%	-3%	-2%	-5%	-8%
Gross Profit	3,583	4,106	4,761	5,469	4,382	5,173	4,250	5,013	5,309	-6%	-8%	-3%	-5%	3%
EBITDA	1,264	1,366	1,570	1,787	1,352	1,685	1,299	1,575	1,731	1%	-7%	5%	-0%	3%
EBIT	965	1,093	1,309	1,536	1,171	1,488	1,074	1,334	1,556	-7%	-12%	2%	-2%	-1%
Reported NPAT	755	916	1,121	1,335	907	1,156	898	1,113	1,325	1%	-3%	2%	1%	1%
Adjusted NPAT	755	916	1,121	1,335	907	1,156	908	1,131	1,397	1%	-3%	1%	-1%	-4%
Reported EPS (undiluted)	0.31	0.35	0.43	0.51	0.34	0.43	0.33	0.42	0.50	3%	-1%	5%	1%	1%
Adjusted EPS (undiluted)	0.31	0.35	0.43	0.51	0.34	0.43	0.34	0.43	0.52	3%	-1%	3%	0%	-1%
DPS	0.02	0.03	0.03	0.04	-	-	0.02	0.03	0.03	NA	NA	8%	3%	16%
BVPS	2.63	2.79	3.20	3.68	2.90	3.25	2.79	3.16	3.60	-4%	-2%	0%	1%	2%
GP margin	*29.8%*	*29.6%*	*30.0%*	*30.2%*	*31.3%*	*31.6%*	*30.0%*	*29.9%*	*27.1%*	*-1.6%*	*-1.6%*	*-0.4%*	*0.1%*	*3.1%*
EBITDA margin	*10.5%*	*9.9%*	*9.9%*	*9.9%*	*9.6%*	*10.3%*	*9.2%*	*9.4%*	*8.8%*	*0.2%*	*-0.4%*	*0.7%*	*0.5%*	*1.0%*
EBIT margin	*8.0%*	*7.9%*	*8.2%*	*8.5%*	*8.4%*	*9.1%*	*7.6%*	*8.0%*	*7.9%*	*-0.5%*	*-0.8%*	*0.3%*	*0.3%*	*0.6%*
Adj NPAT margin	*6.3%*	*6.6%*	*7.1%*	*7.4%*	*6.5%*	*7.1%*	*6.4%*	*6.7%*	*7.1%*	*0.1%*	*0.0%*	*0.2%*	*0.3%*	*0.3%*

Source: Company data, Refinitiv Eikon, HSBC estimates. Priced and consensus estimates as at 19 June 2020. NA – Not applicable/available.

Note: We introduce 2022e estimates in this report.

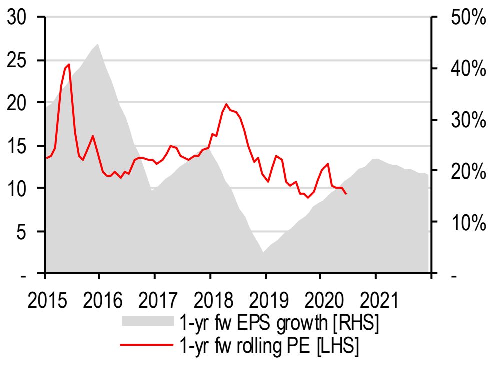
Valuation and risks

Our target price for CSI is HKD5.40 (down from HKD5.59). Our target price is set using a PE valuation methodology. We also cross-check our target price with a DCF valuation. Our target multiple has been updated to a 13.7x 2020e PE (from a 14.7x 2019e PE on non-GAAP earnings).

PE-based valuation methodology

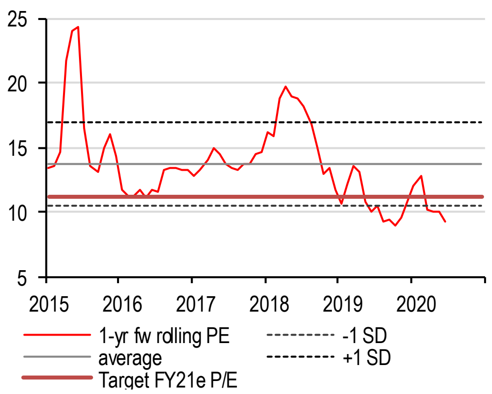
We value CSI using a PE-based valuation methodology where we value the company at a 13.7x 2020e PE. Our 13.7x PE target multiple is based on the company's average one-year forward PE multiple since 2015. Our previous target price for the company was also set using PE, however, at a 14.7x 2019e PE.

Fig 8: CSI historical one-year forward PE vs EPS growth



Source: Refinitiv Eikon, HSBC

Fig 9: CSI trading PE vs historical average and target implied 2021e PE



Source: Refinitiv Eikon, HSBC

DCF cross-check on valuation

We cross check our target price for CSI using a DCF valuation. Our DCF outputs a 2020e valuation of HKD9.00 per share, a 67% premium to our PE-based target price.

Fig 10: HSBC DCF valuation for CSI

RMBm, unless otherwise stated	FY19	FY20e	FY21e	FY22e	FY23e	FY24e	FY25e	FY26e	FY27e	FY28e	FY29e	FY30e
EBITDA	1,264	1,366	1,570	1,787	1,989	2,204	2,438	2,686	2,951	3,230	3,524	3,833
less: Total Capex	(259)	(240)	(232)	(226)	(220)	(214)	(209)	(205)	(201)	(197)	(193)	(190)
less: Change in Working Capital	(670)	(550)	(398)	(434)	(465)	(500)	(535)	(570)	(603)	(636)	(669)	(701)
less: Tax Expense	(42)	(51)	(62)	(74)	(85)	(97)	(110)	(123)	(137)	(152)	(168)	(184)
Net Cash Flows Available	**292**	**525**	**877**	**1,053**	**1,219**	**1,393**	**1,583**	**1,789**	**2,010**	**2,245**	**2,494**	**2,758**
Terminal value												**25,017**
RMB/HKD	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Net Income Available (HKD)	**327**	**589**	**985**	**1,182**	**1,368**	**1,563**	**1,777**	**2,008**	**2,256**	**2,520**	**2,799**	**31,172**
NPV of Firm (HKDm)		22,441	23,822	25,136	26,396	27,570	28,637	29,565	30,329	30,876	31,172	-
Less: Net Debt / Add: Net Cash (HKDm)		1,153										
Equity Value (HKDm)		**23,594**										
Value per Share (HKD/share)		8.99										
DCF Valuation (HKD rounded)		**9.00**										

Source: HSBC estimates

The main inputs for our DCF valuation are listed in the following table:

Fig 11: HSBC inputs for CSI's WACC and DCF valuation

Input	Value
Equity Beta	1.88
Risk Free Rate	2.5%
Equity Risk Premium	5.0%
Cost of Equity	11.9%
Cost of Debt	7.1%
Debt/Capital	16.9%
Tax	5%
WACC	**11.0%**
Terminal growth rate	-

Source: HSBC estimates

The large discount of our target price relative to the DCF valuation despite using a relatively high discount rate is due to the historical nature of CSI having traded at a valuation below its DCF value. We think this as a result of the low market capitalisation and limited trading liquidity, which resulted in a discount in the traded valuation vs the underlying valuation.

This is likely to persist as a headwind for the company going forward, in our view, and, as such, we continue to base the company's valuation on the average historical one-year forward multiple rather than revert to a DCF-based valuation.

Target price-implied multiples vs historical multiples

The following table illustrates the current trading valuation and our target price-implied multiples for CSI.

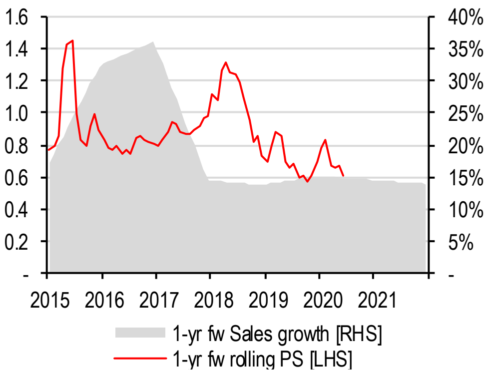
Fig 12: Current and target price-implied multiples for CSI

	Trading valuation			Target valuation		
	FY20e	FY21e	FY22e	FY20e	FY21e	FY22e
PE (x)	11.4	9.4	7.9	13.7	11.3	9.5
PS (x)	0.8	0.7	0.6	0.9	0.8	0.7
EV/EBITDA (x)	7.1	5.7	4.5	8.3	6.8	5.5
PB (x)	1.5	1.3	1.1	1.7	1.5	1.3
Dividend Yield	0.6%	0.7%	0.9%	0.5%	0.6%	0.7%
FCF yield	4.9%	8.2%	9.8%	4.2%	6.9%	8.3%

Source: Refinitiv Eikon, HSBC estimates. Note: Priced as at 19 June 2020.

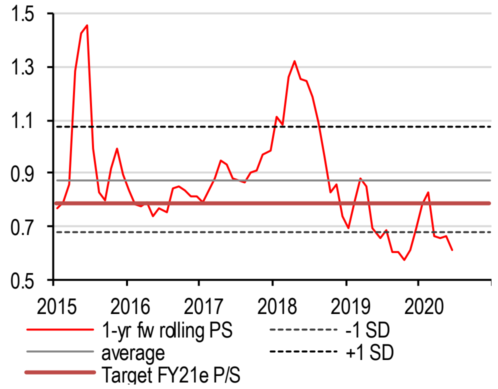
Price-to-Sales (PS): CSI has been trading at a 0.6-1.5x one-year forward PS since 2015. Our target price implies a 0.8x FY21e PS multiple, which is below the historical PS the company has traded at in Hong Kong of 0.9x on average since 2015.

Fig 13: CSI historical one-year forward PS vs sales growth



Source: Refinitiv Eikon, HSBC

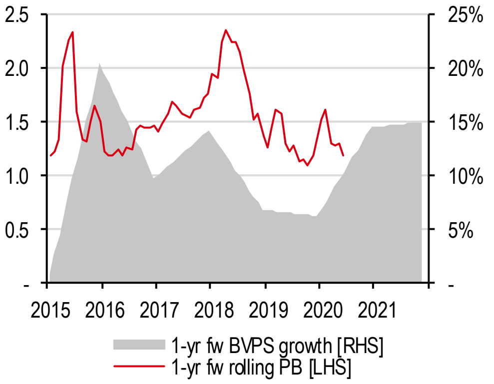
Fig 14: CSI trading PS vs historical average and target-implied FY21e PS



Source: Refinitiv Eikon, HSBC

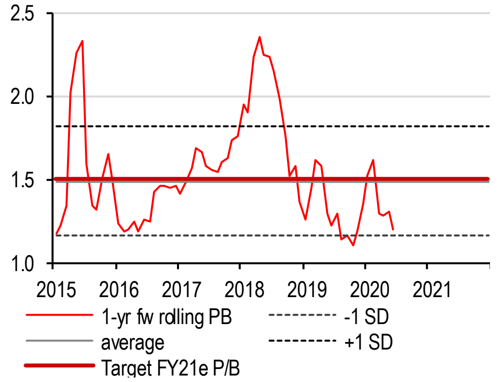
Price-to-book (PB): CSI has been trading at a 1.1-2.4x one-year forward PB since 2015. Our target price implies a 1.5x FY21e PB multiple, which is in line with the historical one-year forward PB multiple.

Fig 15: CSI historical one-year forward PB vs BVPS growth



Source: Refinitiv Eikon, HSBC

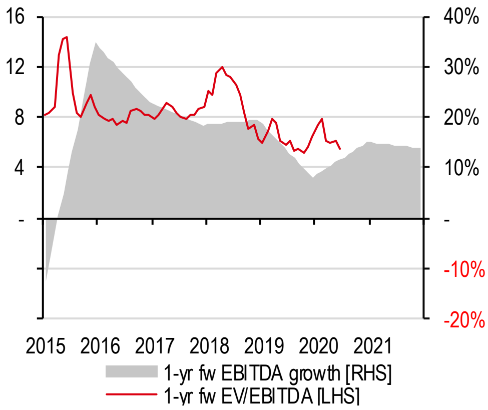
Fig 16: CSI trading PB vs historical average and target-implied FY21e PB



Source: Refinitiv Eikon, HSBC

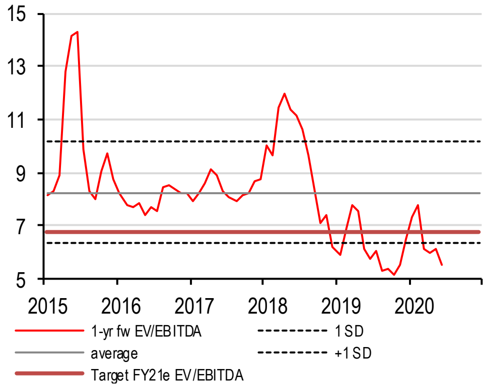
EV/EBITDA: CSI has been trading at a 5.2-14.3x one-year forward EV/EBITDA since 2015. Our target price implies a 6.8x FY21e EV/EBITDA multiple, which is 0.8 SD below the historical one-year forward EV/EBITDA of 8.3x since 2015.

Fig 17: CSI historical one-year forward EV/EBITDA vs EBITDA growth



Source: Refinitiv Eikon, HSBC

Fig 18: CSI trading EV/EBITDA vs historical average and target-implied FY21e EV/EBITDA



Source: Refinitiv Eikon, HSBC

Potential share price catalysts

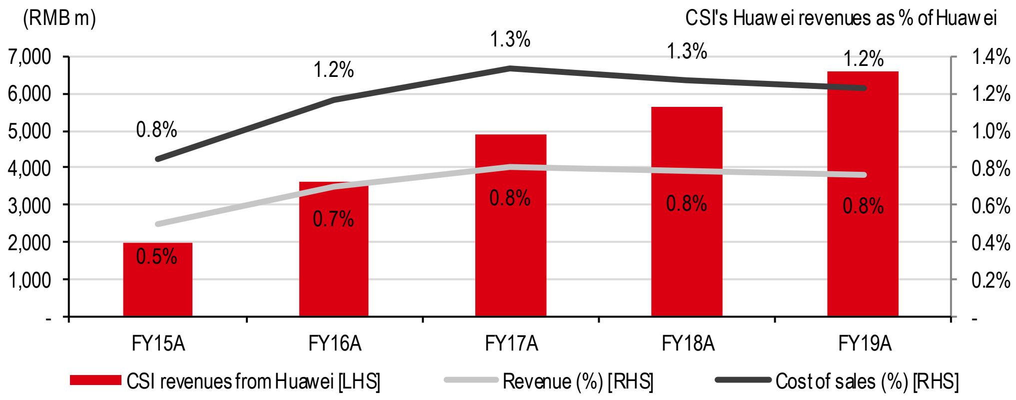
Stronger-than-forecast growth in new business: CSI's cloud and big data businesses are still in the early stages of development and, as such, the growth trajectory in these businesses are hard to gauge. Faster-than-forecast growth could lead to upside to our estimates.

Greater-than-forecast margin expansion: CSI has guided to 0.25-0.75% y-o-y EBIT margin expansion over the coming few years from a change in business mix as new businesses ramp up. Given the uncertainty of new businesses, we have conservatively taken the bottom end of guidance, forecasting a 0.25% y-o-y EBIT margin expansion in 2021-22. Greater-than-forecast margin expansion could pose upside to our estimates.

Key downside risks

Significant exposure to Huawei: Almost half of CSI's revenue is derived from Huawei. The company's high exposure creates potential risk. That said, CSI's exposure to Huawei is in software, with increasing exposure to cloud-based software based on Kunpeng and HMS ecosystems. We think US scrutiny may create downside risk for CSI, if it was the case that

Fig 19: CSI's Huawei-derived revenues as a % of Huawei's revenue and cost of sales



Source: Company data, HSBC

Huawei was no longer able to operate; however, on the flip-side, it may also force the rapid growth of domestic and independent controllable science and technology. To that end CSI could be a beneficiary. Furthermore, CSI's revenues derived from Huawei as a percentage of Huawei's revenues and cost of sales in 2019 was only 0.8% and 1.2%, respectively.

Size and liquidity: CSI's relatively small market capitalisation and limited share liquidity may limit the relative attractiveness of investing in the company and has historically resulted in CSI trading at a discount to its DCF valuation. If there is no increase in the company's share liquidity and market capitalisation, then this may continue to be an overhang, hindering the company's valuation relative to its DCF valuation.

Growth rates below company guidance: CSI has guided to 15-20% revenue growth in 2020 and 20% net profit growth, growth which if lower than this guidance may result in market disappointment and earnings expectation downgrades for future years.

Currency risk: Several of CSI's subsidiaries have bank balances and cash, trade receivables denominated in foreign currencies arising from income generated from the provision of services, trade and other payables arising from purchases denominated in foreign currencies and borrowing, which expose CSI to foreign currency risk. CSI's principal operating subsidiaries are located in mainland China, the United States and Japan, and principal businesses are conducted in RMB. CSI is mainly exposed to USD, HKD and JPY.

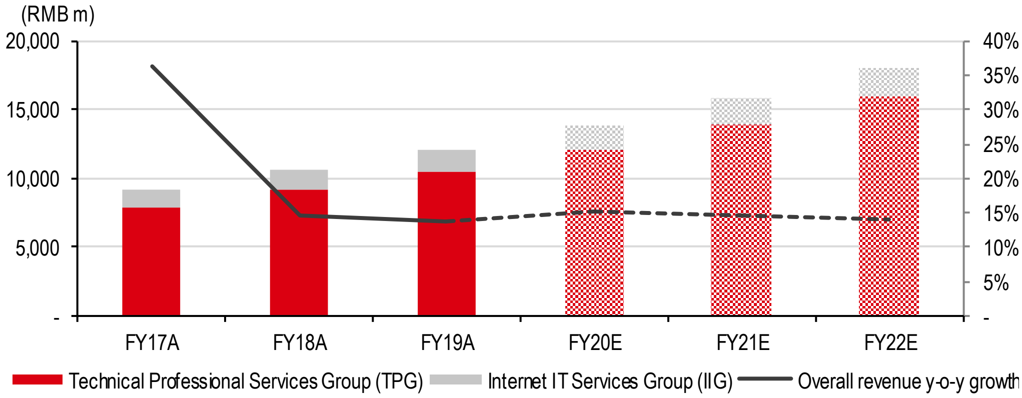
Market risk: The loss of market share is a risk encountered by CSI. The company constantly faces fierce competition in its core market of mainland China. The financial position of CSI may be adversely affected, if it fails to respond to market changes, resulting in the loss of business to competitors.

Business segments

CSI has historically split its revenue into two business units: the **Technology Professional Services Group (TPG)** and the **Internet IT Services Group (IIG)**:

- **Technology Professional Services Group:** provides technical services and solutions to large customers and industries. Adhering to its consultation-driven methodology, CSI uses its self-developed software platform, with mature project management skills and human resource capabilities, training a large number of industry experts and technical experts.
- **Internet IT Services Group:** is targeted at the long-tail customers based on the JointForce platform as the core vehicle. JointForce is an online IT crowdsourcing platform that provides online transactions and software development management services, matching, coordinating and guaranteeing service providers (contracting companies) and engineers based on the platform to provide quality IT services to customers (outsourcing companies).

Fig 20: ChinaSoft International revenue breakdown by business segment



Source: Company data, HSBC estimates

Going forward the company is looking to reorganise its business segments under a different structure, separating the traditional business from the new business.

Traditional business segment:

- **IT outsourcing/solutions:** This business model allows CSI to essentially latch onto large customers and use them to grow horizontally and vertically. The Top 10 customers make up around 70% of total revenue.

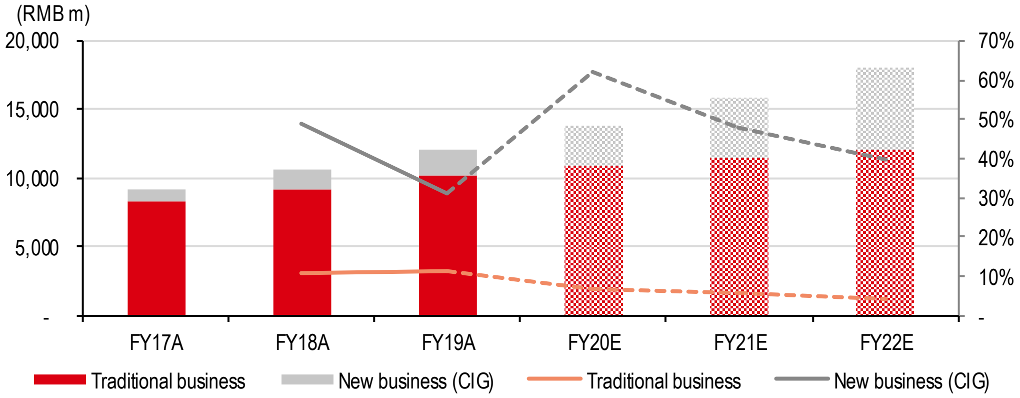
The traditional business will likely still continue to operate with a growth objective to gain USD100m or above revenue contribution customers. Guidance for growth in this business, however, is for high single digits to low double digits as the size in this area is already large.

New business segments:

- **Cloud:** This includes cloud migration; cloud operation cloud integrated services (using the infrastructure of third-party providers). If customers go to Huawei's website and look at product solutions and services, a lot are done by certified external professionals not by Huawei.
- **Big data:** This refers to data management, data application and data analysis. CSI focuses on software. The company started expanding into big data initially in finance, working on anti-fraud systems and other finance-related software in China, and now it is branching out to manufacturing services.

The following table illustrates our estimates breakdown of the company's revenue, categorised into the traditional segment and the new business segments.

Fig 21: ChinaSoft International revenue breakdown by redefined business segments



Source: Company data, HSBC estimates

Financial estimates

Income statement

We estimate revenue will grow at a 15% CAGR in 2019-22e as per the above business mix breakdown, with growth driven largely by new businesses, which we estimate will see strong double-digit growth, whereas traditional business is estimated to see high single-digit y-o-y growth. Management guides that EBIT margins will improve 0.25-0.75% y-o-y as a result of the increasing mix of new business segments. We assume a 0.25% y-o-y increase in EBIT margins

Fig 22: CSI Income statement

RMBm, unless otherwise stated	FY17a	FY18a	FY19a	FY20e	FY21e	FY22e
Revenue	**9,244**	**10,585**	**12,042**	**13,859**	**15,878**	**18,089**
Cost of sales and services	(6,493)	(7,340)	(8,459)	(9,753)	(11,116)	(12,620)
Gross profit	**2,750**	**3,245**	**3,583**	**4,106**	**4,761**	**5,469**
Other income	100	64	178	205	235	267
Loss from derecognition of financial assets	-	(7)	(5)	(5)	(6)	(7)
Impairment loss, net of reversal	(26)	(35)	(75)	(86)	(99)	(113)
Other gains or losses	(4)	(6)	(35)	(40)	(46)	(53)
Selling and distribution costs	(370)	(496)	(618)	(711)	(814)	(928)
Administrative expenses	(1,086)	(1,091)	(1,196)	(1,376)	(1,575)	(1,794)
Research and development costs	(567)	(739)	(809)	(932)	(1,069)	(1,218)
Other expenses	(82)	(68)	(59)	(68)	(78)	(88)
EBIT	**716**	**866**	**965**	**1,093**	**1,309**	**1,536**
Depreciation & amortisation	178	192	298	273	261	251
EBITDA	**894**	**1,058**	**1,264**	**1,366**	**1,570**	**1,787**
Finance costs	(103)	(118)	(166)	(124)	(123)	(123)
Associates & JCEs	20	12	(0)	(0)	(0)	(0)
Profit before tax	**633**	**760**	**799**	**969**	**1,186**	**1,412**
Income tax expense	(71)	(44)	(42)	(51)	(62)	(74)
Non-controlling interest	4	(0)	(2)	(2)	(2)	(3)
NPAT	**566**	**716**	**755**	**916**	**1,121**	**1,335**
Basic EPS (RMB)	0.2359	0.2954	0.3071	0.3489	0.4270	0.5088
Diluted EPS (RMB)	0.2311	0.2789	0.3005	0.3593	0.4361	0.5167
DPS (HKD)	0.0180	0.0215	0.0219	0.0250	0.0305	0.0364

Source: Company data, HSBC estimates

in 2021-22e. We assume the lower end of CSI's guidance as we think there is execution risk and uncertainty in margin expansion at this point in time. Top-line growth, combined with mild margin expansion, results in our 21% CAGR in NPAT over the forecast period.

Cash flow statement

We estimate CSI's cash flows will grow at a similar pace to the company's EBITDA.

The company guides to capex to remain at similar levels to 2019. We estimate capex in 2020-22e will stay at similar levels, an estimated RMB226-240m in capex each year.

Fig 23: CSI Cash flow statement

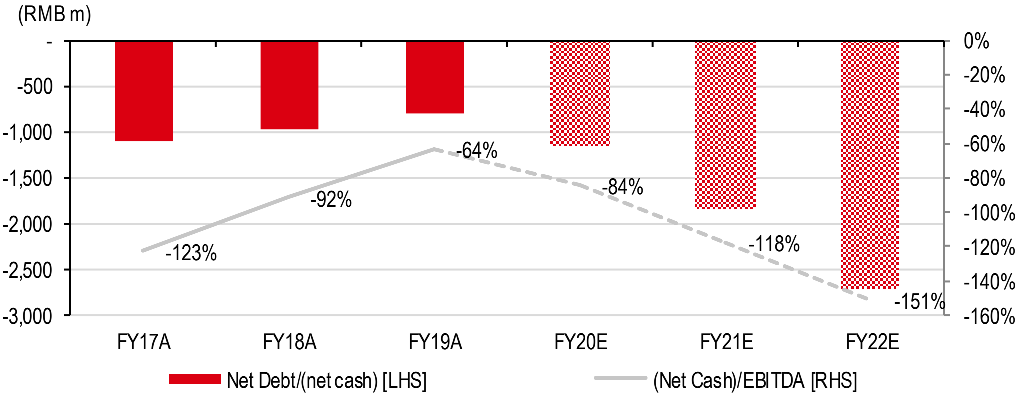
RMBm, unless otherwise stated	FY17a	FY18a	FY19a	FY20e	FY21e	FY22e
Operating activities						
Cash generated from operations	**380**	**243**	**594**	**816**	**1,172**	**1,353**
Income tax paid	(48)	(112)	(42)	(51)	(62)	(74)
Taxation refunded	-	30	-	-	-	-
Net cash generated from operating activities	**332**	**161**	**62**	**765**	**1,110**	**1,279**
Net cash used in investing activities	**(234)**	**(167)**	**(259)**	**(240)**	**(232)**	**(226)**
Net cash from financing activities	**432**	**853**	**(46)**	**(48)**	**(58)**	**(71)**
Net increase in cash and cash equivalents	530	847	(242)	477	819	981
Effect of foreign exchange rate changes	(44)	14	6	-	-	-
Cash and cash equivalents at beginning of the year	1,299	1,785	2,646	2,410	2,887	3,706
Cash and cash equivalents at the end of the year	**1,785**	**2,646**	**2,410**	**2,887**	**3,706**	**4,687**

Source: Company data, HSBC estimates

Balance sheet

CSI has a strong balance sheet with a net cash position. As a percentage of EBITDA, net cash was 64% as at the end of 2019. We estimate this reserve will increase to 151% of EBITDA by 2022e as the company continues to generate cash flow.

Fig 24: CSI gearing profile



Source: Company data, HSBC estimates

Fig 25: CSI Balance sheet

RMBm, unless otherwise stated	FY17a	FY18a	FY19a	FY20e	FY21e	FY22e
Non-current assets						
Property plant & equipment	853	838	802	792	781	770
Right-of-use assets	-	-	279	279	279	279
Intangible assets	179	148	127	105	87	72
Goodwill	997	1,006	974	974	974	974
Investments accounted for using the equity method	133	144	228	228	228	228
Rights-of-use assets	-	-	-	-	-	-
Available for sale investment	65	-	-	-	-	-
Equity instrument at fair value through OCI	-	52	63	63	63	63
Prepaid lease payments	38	37	-	-	-	-
Deposits paid for investment in an associate	-	-	-	-	-	-
Derivative financial instruments	-	-	-	-	-	-
Deferred tax assets	8	9	8	8	8	8
Other receivable	30	30	66	66	66	66
	2,303	**2,264**	**2,547**	**2,514**	**2,485**	**2,459**
Current assets						
Inventories	26	64	54	108	123	140
Trade and other receivables	1,960	2,585	3,297	3,839	4,403	5,018
Bills receivable	12	22	4	4	4	4
Contract assets	-	2,819	2,228	2,228	2,228	2,228
Amounts due from related companies	84	68	75	75	75	75
Pledged deposits	1	19	13	13	13	13
Bank balances and cash	1,785	2,646	2,526	2,877	3,570	4,425
	6,449	**8,225**	**8,198**	**9,145**	**10,417**	**11,903**
Current liabilities						
Amounts due to customers for contract work	45	-	-	-	-	-
Trade and other payables	1,584	1,497	1,229	1,275	1,456	1,653
Bills payables	20	45	22	22	22	22
Lease liabilities	-	-	126	126	126	126
Contract liabilities	-	166	139	139	139	139
Amounts due to related companies	59	18	3	3	3	3
Dividend payable	0	0	0	0	0	0
Taxation payable	158	125	84	84	84	84
Convertible loan notes	-	198	24	24	24	24
Borrowings	686	1,676	1,523	1,523	1,523	1,523
	2,552	**3,726**	**3,150**	**3,195**	**3,377**	**3,573**
Net current assets	**3,897**	**4,499**	**5,049**	**5,949**	**7,040**	**8,330**
Total assets less current liabilities	**6,200**	**6,763**	**7,596**	**8,463**	**9,525**	**10,789**
Non-current liabilities						
Deferred tax liabilities	16	11	10	10	10	10
Consideration payable on acquisition of a subsidiary	-	-	-	-	-	-
Lease liabilities	-	-	-	-	-	-
Convertible loan notes	954	720	728	728	728	728
Lease liabilities	-	-	124	124	124	124
Borrowings	-	-	200	200	200	200
	970	**731**	**1,062**	**1,062**	**1,062**	**1,062**
Total liabilities	**3,522**	**4,457**	**4,211**	**4,257**	**4,438**	**4,635**
Capital and reserves						
Share capital	110	113	116	116	116	116
Treasury shares	-	-76	-471	-471	-471	-471
Share premium & other reserves	5,056	5,930	6,822	7,690	8,752	10,016
Equity attributable to owners of the Company	**5,166**	**5,967**	**6,468**	**7,335**	**8,397**	**9,661**
Non-controlling interests	64	65	66	66	66	66
Total equity	**5,230**	**6,032**	**6,534**	**7,401**	**8,464**	**9,728**

Source: Company data, HSBC estimates

Environmental, Social and Governance

Environmental

CSI has seen a decline in greenhouse gas (GHG) emissions from direct sources over the past three years; however, this has been offset by an increase in indirect sources. Overall, CSI's emissions have continued to grow but at a slower rate than the company's overall growth, indicating an increase in efficiency.

Energy consumption-wise, over 98% of the company's energy consumption comes from electricity. As such, although consumption of gasoline has been declining in absolute terms over the previous few years, its overall energy consumption has continued to grow.

Fig 26: CSI Environmental indicators

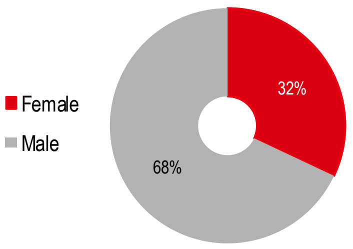
	2017	2018	2019
Emissions			
Greenhouse gas emissions from direct sources (tons CO_2 equivalent)	81	72	60
Greenhouse gas emissions from indirect sources (tons CO_2 equivalent)	12,948	13,757	14,605
Greenhouse gas emissions due to employees' business trips (tons CO_2 equivalent)	4,384	5,872	6,197
Total greenhouse gas emissions (tons CO_2 equivalent)	17,413	19,701	20,862
Greenhouse gas emission per million dollars operating income (tons CO_2 equivalent/USDm)	1.88	1.86	1.73
Total emission of domestic waste water (tons)	188,102	200,539	209,496
Total domestic garbage from office operation (tons)	3,926	4,500	4,821
Resource utilisation			
Consumption of gasoline (litres)	37,067	33,178	27,266
Electricity consumption (10,000 kWh)	1,937	2,223	2,369
Consolidated water consumption per million dollars operating income (10,000 kWh/USDm)	0.21	0.21	0.20
Consolidated energy consumption (tons standard coal)	2,421	2,770	2,941
Consolidated energy consumption per million dollars operating income (tons standard coal/ USDm)	0.26	0.26	0.24
Consolidated water consumption per million dollars operating income (tons/USDm)	23.94	22.29	20.47
Water consumption (tons)	221,296	235,928	246,466

Source: Company data

Social

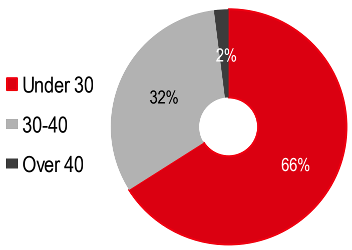
CSI takes into account the needs of stakeholders, such as employees, suppliers, customers and the community, performing its corporate social responsibility by demonstrating concerns over its employees and their development, establishing an effective supplier management system, focusing on customer experience, improving product quality, and participating in charity activities.

Fig 27: Distribution of employees by gender as of 2019



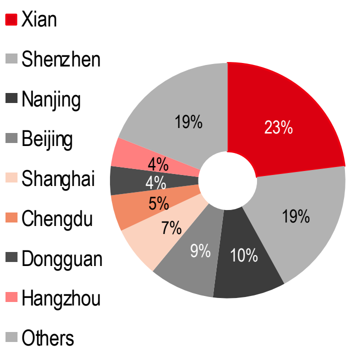
Source: Company data

Fig 28: Distribution of employees by age as of 2019



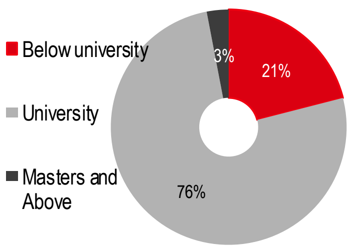
Source: Company data

Fig 29: Distribution of employees by area as of 2019



Source: Company data

Fig 30: Distribution of employees by academic qualification as of 2019



Source: Company data

Governance

Independent board members make up 38% of CSI's board. This compares with other internet and software companies, which have a board independence of 33-80%. The company has two female board members, which relative to other companies is high. Its 25% female board composition ranks the highest amongst the peers we use.

Fig 31: CSI board composition vs software/internet peers

	ChinaSoft Int'l	AsiaInfo Tech	Kingdee	Kingsoft	Baidu	Alibaba	Tencent
Executive directors	2	3	2	2	1	3	2
Non-executive directors	3	3	3	3	0	3	3
Independent non-executive directors	3	3	3	3	4	5	5
Female	2	0	1	1	0	1	1
Board independence	38%	33%	38%	38%	80%	45%	50%
Female board members	25%	0%	13%	13%	0%	9%	10%

Source: Company data, HSBC

Fig 32: CSI Board meeting attendance 2019 vs software/internet peers

	ChinaSoft Int'l	AsiaInfo Tech	Kingdee	Kingsoft
Board meeting attendance				
Executive directors	100%	100%	100%	100%
Non-executive directors	100%	87%	71%	100%
Independent non-executive directors	100%	87%	100%	100%
General meeting attendance				
Executive directors	100%	83%	100%	100%
Non-executive directors	0%	50%	0%	50%
Independent non-executive directors	33%	83%	33%	100%

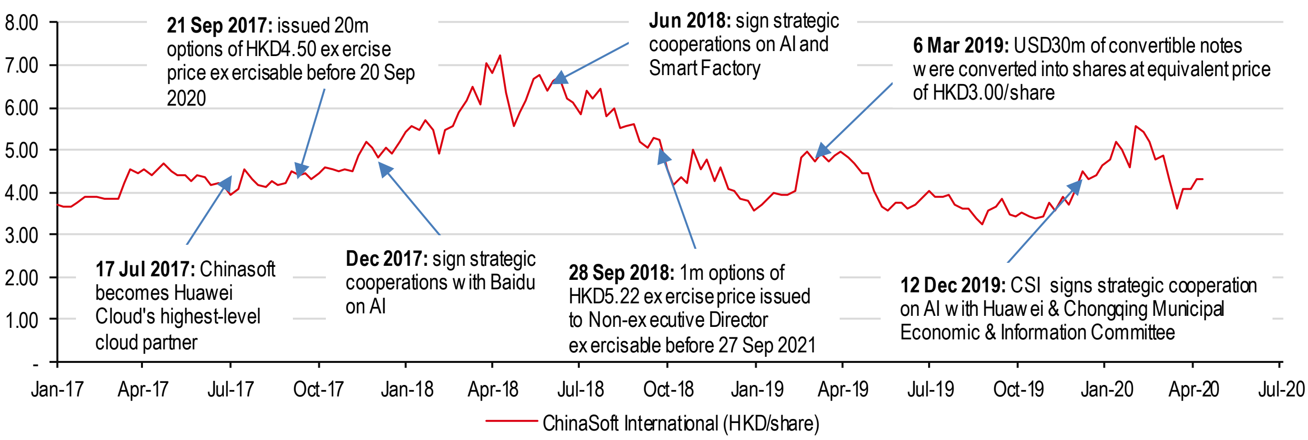
Source: Company data, HSBC

About ChinaSoft International

ChinaSoft International (CSI) was founded in 2000 and is a large-scale integrated software and information service provider, providing end-to-end IT services to customers worldwide. In 2003, CSI listed on the Hong Kong Stock Exchange, being the first company to list after SARS. CSI is committed to becoming a world-class information technology service leader. Its business has achieved rapid growth for 17 consecutive years and continues to lead the domestic software service industry. The company is ranked 14th in the "Top 100 Chinese Software Business Companies (in terms of revenue)" by the Ministry of Industry and Information Technology in 2019, No 10 in the "Top 100 Comprehensive Competitiveness of Software and Information Technology Services in 2019", and successfully ranked among the Top 100 in Gartner's "IT service market share, worldwide" with more than RMB10bn in service income.

CSI has more than 300 software copyrights and patents, providing customers with "end-to-end" IT services. It has rich consultation, design, implementation and service experience in the digital application of new technologies, including cloud computation, big data, artificial intelligence, Internet of Things, and mobile Internet, comprehensively helping customers to achieve digital transformation. It serves customers, including many Fortune 500 companies and many high-growth potential industry-leading customers in industries, such as finance, telecommunications, Internet and high technology, government, manufacturing and circulation, public utilities (transportation, energy), education, etc. In addition to China, CSI has operations in Asia Pacific, North America, Europe, and Latin America.

Fig 33: ChinaSoft International share price history and key events



Source: Refinitiv Eikon, HSBC

Shareholding structure

The table below shows CSI's management shareholdings as disclosed in the company's latest annual report and filings from Refinitiv Eikon.

Dr. Chen Yuhong is the Chairman and CEO of CSI. He has over 20 years of experience in the software information industry. Prior to joining CSI on 25 April 2000, Dr. Chen worked at China National Computer Software & Technology Service Corporation (CS&S) from October 1996 to April 2000, subsequently was appointed vice president in June 1999 and senior vice president of CNTC (中軟網絡信息技術有限公司) in December 2003. He has also been appointed a director of ChinaSoft Resources Information Technology Services Limited.

Dr. Tang Zhenming is the senior vice president of CSI. He is responsible for CSI's training business. Dr. Tang obtained a doctorate degree in motor electronic control from the Beijing Institute of Technology (北京理工大 學) in 1994. Prior to joining the company on 25 April 2000, Dr. Tang was employed by the Beijing Institute of Technology Industrial Company (北京理工大學產業總公司) as deputy general manager from May 1995 to July 1998 and by ChinaSoft Cyber Information Technology Co., Ltd (Beijing) as deputy general manager from August 1998 to March 2003. Dr. Tang was also employed by the American W&P Company, Beijing Office (美國 W&P 公司北京辦事處) as an officer from December 1993 to March 1995.

Dr. Zhang Yaqin was appointed on 31 December 2008. He was previously the president of Baidu from September 2014 to October 2019, in charge of autonomous and intelligent cloud emerging business and basic technology systems, and also the chairman of the Baidu R&D Centre in the US. Prior to joining Baidu, Dr. Zhang served various positions at Microsoft Corporation from January 1999 to September 2014.

Mrs. Gavriella Schuster has over the past 24 years managed and deployed a number of programmes and products, as well as licensing, pricing and go-to-market initiatives for Microsoft Corporation.

Fig 34: ChinaSoft International Top 10 shareholders

Name of shareholder	Shareholding interest	Description
Chen Yuhong	15.98%	Chairman & Chief Executive Officer
Dr. Tang Zhenming	0.46%	Senior Vice President
Dr. Zhang Yaqin	0.06%	Non-executive Director
Mrs. Gavriella Schuster	0.04%	Non-executive Director

Source: Company data, Refinitiv Eikon

Beyond the above, the top three institutional investors in CSI hold 13.2% of the company's shares.

Fig 35: Valuation comps table

Name	Ticker	Rating	Last Price*	1M chg (%)	3M chg (%)	YTD chg (%)	TP (lcy)	Up/Dn Side (%)	Mkt Cap (USDbn)	P/E (x) FY20E	P/E (x) FY21E	P/E (x) FY22E	P/S (x) FY20E	P/S (x) FY21E	P/S (x) FY22E	P/B (x) FY20E	P/B (x) FY21E	P/B (x) FY22E	Yield (%) FY20E	Yield (%) FY21E	Yield (%) FY22E	EPS growth (%) FY20E	EPS growth (%) FY21E	EPS growth (%) FY22E	Revenue growth (%) FY20E	Revenue growth (%) FY21E	Revenue growth (%) FY22E	ROE (%) FY20E	ROE (%) FY21E	ROE (%) FY22E	Net D/E (%) FY20E	Net D/E (%) FY21E	Net D/E (%) FY22E	Net D/EBITDA (%) FY20E	Net D/EBITDA (%) FY21E	Net D/EBITDA (%) FY22E
China TMT																																				
Alibaba	BABA US	Buy	223.54	3	24	5	256.00	15	599.7	3.6	4.5	3.5	8.3	6.5	5.3	0.7	0.6	0.5	-	-	-	68	-18	28	35	29	23	22.2	20.9	21.8	-23	-29	-33	-1.8	-1.9	-2.1
AsiaInfo	1675 HK	Buy	9.96	-0	23	12	12.80	29	0.9	13.7	11.3	9.4	1.0	0.9	0.7	1.5	1.4	1.3	2.7	3.3	4.2	-28	21	19	12	16	20	12.8	12.8	14.0	-46	-49	-51	-3.2	-3.0	-2.7
Baidu	BIDU US	Buy	123.46	12	38	-2	132.00	7	42.6	2.4	1.5	1.4	2.8	2.6	2.4	0.2	0.2	0.2	-	-	-	-8	54	12	2	8	7	9.8	14.0	14.1	17	8	-2	1.4	0.5	-0.1
Bilibili Inc	BILI US	NR	42.61	21	104	129			14.8	nmf	nmf	282.9	9.6	6.9	5.3	15.8	19.4	18.3	-	-	-	-69	49	138	62	39	29	-27.4	-17.4	7.7	-60	-46	-58	2.7	2.7	-2.2
Chanjet Info Tech	1588 HK	NR	9.50	2	15	28			0.3	149.4	131.8	n/a	3.5	3.3	n/a	11.0	10.8	n/a	0.6	0.7	-	4	13	-100	15	8	n/a	7.2	8.1	n/a	n/a	n/a	n/a	n/a	n/a	n/a
China Comservice	0552 HK	Buy	5.24	-8	5	-8	6.90	32	4.7	10.8	8.4	7.0	0.3	0.2	0.2	0.9	0.8	0.8	3.3	4.3	5.1	0	28	20	11	21	10	8.6	10.2	11.3	-54	-59	-63	-4.2	-4.1	-4.1
ChinaSoft Int'l	0354 HK	Buy	4.47	6	33	2	5.40	21	1.5	11.4	9.4	7.9	0.8	0.7	0.6	1.5	1.3	1.1	0.6	0.7	0.9	20	21	18	15	15	14	13.9	14.8	15.3	-16	-22	-28	-0.8	-1.2	-1.5
Douyu Int'l	DOYU US	Hold	10.84	40	35	28	8.20	-24	3.4	30.9	20.7	15.1	2.5	2.1	1.9	3.1	2.7	2.3	-	-	-	121	49	37	33	21	12	10.7	14.1	16.6	-109	-107	-104	-13.1	-8.7	-6.9
GDS	GDS US	NR	72.94	15	46	41			11.1	nmf	nmf	145.9	13.7	10.0	7.7	9.0	8.4	7.4	-	-	-	45	98	7,166	39	38	28	-1.2	2.5	6.9	138	166	186	5.7	5.1	4.4
HUYA	HUYA US	Buy	19.47	4	49	8	20.20	4	4.3	3.9	2.5	1.7	2.6	2.1	1.9	0.4	0.4	0.3	-	-	-	43	54	45	37	24	14	11.9	16.0	19.4	-33	-52	-68	-4.8	-5.0	-4.8
JOYY	YY US	NR	94.40	49	125	79			7.4	26.0	17.8	13.1	2.2	2.0	1.7	1.6	1.5	1.3	-	-	-	-7	46	36	-5	9	15	5.9	7.8	9.5	-55	-52	-66	-8.4	-5.8	-6.3
Kingdee	0268 HK	Hold	15.88	18	74	104	16.00	1	6.8	172.4	79.1	63.3	11.7	10.2	8.9	7.5	6.9	6.3	0.1	0.2	0.2	-25	118	25	24	15	14	4.6	9.4	10.7	-41	-39	-42	-3.1	-2.2	-2.3
Kingsoft Corp	3888 HK	Buy	30.20	2	56	50	36.00	19	5.3	153.0	109.7	51.2	7.2	6.4	5.7	2.6	2.6	2.5	0.5	0.6	0.8	116	40	114	-16	13	12	1.8	2.4	5.0	-54	-43	-31	-3.5	-2.3	-1.4
Momo	MOMO US	NR	19.56	-14	-4	-39			4.1	8.7	6.6	5.8	1.7	1.5	1.3	2.2	1.6	1.3	-	-	-	-21	32	14	-1	17	11	21.3	23.6	21.8	-55	-65	-196	-2.3	-2.7	-9.7
NetEase Inc	NTES US	Buy	409.30	3	41	33	465.00	14	113.6	22.3	17.6	16.3	11.4	10.1	9.4	4.4	3.7	3.1	1.0	1.2	1.3	8	27	8	19	13	7	21.4	22.7	20.6	7	-4	-9	0.3	-0.2	-0.4
Neusoft Corp	600718 US	NR	11.08	0	-8	-2			1.9	nmf	313.7	n/a	1.6	1.4	n/a	11.2	10.8	n/a	-	-	-	-167	1,350	-100	0	14	n/a	-0.3	3.5	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Tencent	0700 HK	Buy	460.40	7	34	23	559.00	21	567.5	36.9	27.4	22.8	8.6	7.2	6.1	7.6	6.1	4.9	0.3	0.3	0.4	16	35	20	24	19	17	22.6	24.6	23.8	-5	-23	-38	-0.2	-0.9	-1.5
Wangsu	300017 US	NR	8.57	7	4	-10			2.9	280.2	248.7	315.1	3.0	2.7	2.4	15.8	15.3	14.7	0.0	0.0	0.0	-35	13	-21	17	11	11	5.5	5.8	6.4	-33	-19	-37	-3.4	-1.5	-4.6
Yangtze Optical	6869 HK	Hold	14.16	-2	3	-9	14.30	1	2.4	11.5	9.6	9.0	1.9	1.8	1.6	1.0	1.0	0.9	2.6	3.1	3.3	6	20	7	15	9	10	9.0	10.1	10.0	-16	-17	-16	-1.2	-1.1	-1.1
Yonyou	600588 CH	Buy	39.23	1	16	80	41.00	5	18.0	120.9	104.2	78.9	12.7	10.6	8.6	15.4	14.5	13.5	0.4	0.6	0.8	-32	16	32	18	20	23	10.8	13.2	16.6	-45	-50	-56	-2.7	-2.5	-2.4
				5	**31**	**18**				**14.2**	**-64.3**	**18.5**	**8.5**	**6.9**	**5.9**	**4.3**	**3.6**	**3.0**	**0.2**	**0.2**	**0.3**	**35**	**15**	**80**	**28**	**23**	**18**	**20.6**	**21.3**	**21.7**	**-13**	**-23**	**-32**	**-0.9**	**-1.2**	**-1.7**
Cloud software																																				
Akamai	AKAM US	NR	100.69	3	13	17			16.3	20.4	18.8	17.0	5.3	4.9	4.6	4.0	4.3	3.4	-	-	-	10	9	11	7	7	6	17.4	18.3	20.7	-16	-22	-38	-0.5	-0.7	-1.2
Amazon	AMZN US	NR	2,654	8	41	44			1,324	139.4	70.6	49.0	3.8	3.2	2.8	16.0	12.0	9.0	-	-	-	-17	97	44	24	18	16	17.1	23.7	25.1	-52	-59	-72	-0.9	-1.0	-1.3
Box Inc	BOX US	NR	19.30	13	66	15			3.0	42.0	29.3	21.9	3.9	3.6	3.2	36.1	18.3	8.5	-	-	-	1,622	43	34	10	10	10	101.4	101.4	51.7	-593	-470	181	-1.4	-1.9	-2.4
Salesforce	CRM US	NR	187.66	7	35	15			169.1	63.5	53.0	42.1	8.5	7.2	6.1	4.8	4.4	4.1	-	-	-	-2	20	26	19	18	18	8.9	9.4	10.2	-22	-34	-44	-1.3	-1.9	-2.3
Cornerstone	CSOD US	NR	37.41	4	53	-36			2.4	33.1	16.5	13.5	3.2	2.6	2.4	n/a	n/a	n/a	-	-	-	-4	100	22	30	22	10	89.4	22.1	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Dropbox	DBX US	NR	23.00	6	29	28			9.5	31.4	26.1	22.4	5.0	4.5	4.1	9.8	7.5	5.0	-	-	-	50	20	16	14	11	11	35.3	33.5	28.6	-114	-127	-102	-2.1	-2.3	-3.1
Instructure	INST US	NR	49.00	-	2	2			1.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	-	-	100	n/a	n/a	-100	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Microsoft Corp	MSFT US	NR	196.32	7	38	24			1,489	33.0	29.3	26.7	10.0	9.0	8.1	11.7	9.9	n/a	1.1	1.2	-	10	13	10	11	12	10	42.1	36.1	n/a	-66	-68	n/a	-1.2	-1.3	n/a
SAP SE	SAPG US	NR	120.40	11	37	0			166.3	21.9	18.9	16.8	5.3	4.9	4.5	4.0	3.7	3.3	1.5	1.7	1.9	-4	16	12	2	8	8	17.7	18.9	19.9	29	18	10	1.0	0.6	0.3
Twilio Inc	TWLO US	NR	215.29	17	161	119			30.2	nmf	1072	545.0	19.9	15.9	12.6	6.9	7.4	7.3	-	-	-	-155	344	97	34	25	26	-0.2	0.6	2.6	-34	-34	-33	-34.2	-12.7	-10.6
VMware Inc	VMW US	NR	143.43	3	43	-6			60.1	23.3	20.3	17.5	5.3	4.8	4.3	6.6	5.2	4.4	-	-	-	-4	15	16	13	11	11	32.9	30.9	26.5	6	-27	-59	0.1	-0.7	-1.6
Workday Inc	WDAY US	NR	187.81	19	48	14			44.1	84.0	68.7	55.1	10.6	9.1	7.6	13.6	12.1	10.6	-	-	-	20	22	25	16	17	20	15.1	10.3	9.6	-39	-61	-72	-1.2	-2.0	-2.3
				8	**40**	**31**				**52.9**	**56.3**	**40.8**	**7.2**	**6.3**	**5.7**	**12.5**	**10.1**	**7.8**	**0.6**	**0.6**	**0.1**	**-2**	**50**	**25**	**16**	**14**	**13**	**28.2**	**28.1**	**22.5**	**-52**	**-57**	**-61**	**-1.3**	**-1.2**	**-1.5**
Indices																																				
HSCEI	HSCEI IND		9,975	1	17	-11																														
SSE Comp Ind	SHCOMP IND		2,968	2	10	-3																														
CSI 300	CSI 300		4,099	4	14	0																														
NASDAQ 100	NDX		10,012	8	37	15																														

*Prices as at 19 June 2020.
**Sector averages are market cap weighted.
Note: NR – Not Rated, n/a – Not Applicable/Available, nmf – Not Meaningful
Source: Refinitiv Datastream, HSBC estimates for rated companies

Disclosure appendix

Analyst Certification

The following analyst(s), economist(s), or strategist(s) who is(are) primarily responsible for this report, including any analyst(s) whose name(s) appear(s) as author of an individual section or sections of the report and any analyst(s) named as the covering analyst(s) of a subsidiary company in a sum-of-the-parts valuation certifies(y) that the opinion(s) on the subject security(ies) or issuer(s), any views or forecasts expressed in the section(s) of which such individual(s) is(are) named as author(s), and any other views or forecasts expressed herein, including any views expressed on the back page of the research report, accurately reflect their personal view(s) and that no part of their compensation was, is or will be directly or indirectly related to the specific recommendation(s) or views contained in this research report: Wei Sim and Neale Anderson

Important disclosures

Equities: Stock ratings and basis for financial analysis

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From 23rd March 2015 HSBC has assigned ratings on the following basis:

The target price is based on the analyst's assessment of the stock's actual current value, although we expect it to take six to 12 months for the market price to reflect this. When the target price is more than 20% above the current share price, the stock will be classified as a Buy; when it is between 5% and 20% above the current share price, the stock may be classified as a Buy or a Hold; when it is between 5% below and 5% above the current share price, the stock will be classified as a Hold; when it is between 5% and 20% below the current share price, the stock may be classified as a Hold or a Reduce; and when it is more than 20% below the current share price, the stock will be classified as a Reduce.

Our ratings are re-calibrated against these bands at the time of any 'material change' (initiation or resumption of coverage, change in target price or estimates).

Upside/Downside is the percentage difference between the target price and the share price.

Prior to this date, HSBC's rating structure was applied on the following basis:

For each stock we set a required rate of return calculated from the cost of equity for that stock's domestic or, as appropriate, regional market established by our strategy team. The target price for a stock represented the value the analyst expected the stock to reach over our performance horizon. The performance horizon was 12 months. For a stock to be classified as Overweight, the potential return, which equals the percentage difference between the current share price and the target price, including the forecast dividend yield when indicated, had to exceed the required return by at least 5 percentage points over the succeeding 12 months (or 10 percentage points for a stock classified as Volatile*). For a stock to be classified as Underweight, the stock was expected to underperform its required return by at least 5 percentage points over the succeeding 12 months (or 10 percentage points for a stock classified as Volatile*). Stocks between these bands were classified as Neutral.

*A stock was classified as volatile if its historical volatility had exceeded 40%, if the stock had been listed for less than 12 months (unless it was in an industry or sector where volatility is low) or if the analyst expected significant volatility. However, stocks which we did not consider volatile may in fact also have behaved in such a way. Historical volatility was defined as the past month's average of the daily 365-day moving average volatilities. In order to avoid misleadingly frequent changes in rating, however, volatility had to move 2.5 percentage points past the 40% benchmark in either direction for a stock's status to change.

Rating distribution for long-term investment opportunities

As of 25 June 2020, the distribution of all independent ratings published by HSBC is as follows:

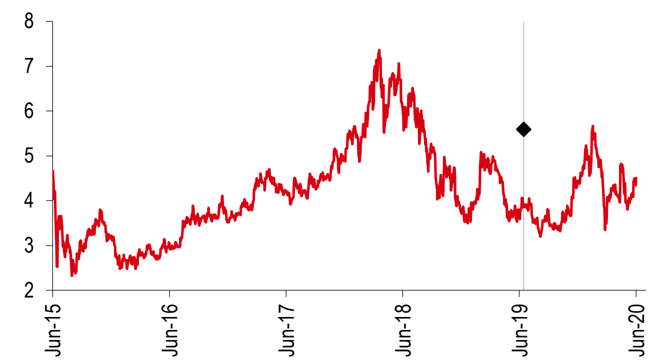
Buy	55%	(31% of these provided with Investment Banking Services)
Hold	36%	(31% of these provided with Investment Banking Services)
Sell	9%	(21% of these provided with Investment Banking Services)

For the purposes of the distribution above the following mapping structure is used during the transition from the previous to current rating models: under our previous model, Overweight = Buy, Neutral = Hold and Underweight = Sell; under our current model Buy = Buy, Hold = Hold and Reduce = Sell. For rating definitions under both models, please see "Stock ratings and basis for financial analysis" above.

For the distribution of non-independent ratings published by HSBC, please see the disclosure page available at http://www.hsbcnet.com/gbm/financial-regulation/investment-recommendations-disclosures.

Share price and rating changes for long-term investment opportunities

ChinaSoft (0354.HK) share price performance HKD Vs HSBC rating history



Source: HSBC

Rating & target price history

From	To	Date	Analyst
N/A	Buy	08 Jul 2019	Colin Liu
Target price	**Value**	**Date**	**Analyst**
Price 1	5.59	08 Jul 2019	Colin Liu

Source: HSBC

To view a list of all the independent fundamental ratings disseminated by HSBC during the preceding 12-month period, please use the following links to access the disclosure page:

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HSBC & Analyst disclosures

Disclosure checklist

Company	Ticker	Recent price	Price date	Disclosure
CHINASOFT	0354.HK	4.51	24 Jun 2020	4, 6, 7

Source: HSBC

1 HSBC has managed or co-managed a public offering of securities for this company within the past 12 months.

2 HSBC expects to receive or intends to seek compensation for investment banking services from this company in the next 3 months.

3 At the time of publication of this report, HSBC Securities (USA) Inc. is a Market Maker in securities issued by this company.

4 As of 31 May 2020, HSBC beneficially owned 1% or more of a class of common equity securities of this company.

5 As of 30 April 2020, this company was a client of HSBC or had during the preceding 12 month period been a client of and/or paid compensation to HSBC in respect of investment banking services.

6 As of 30 April 2020, this company was a client of HSBC or had during the preceding 12 month period been a client of and/or paid compensation to HSBC in respect of non-investment banking securities-related services.

7 As of 30 April 2020, this company was a client of HSBC or had during the preceding 12 month period been a client of and/or paid compensation to HSBC in respect of non-securities services.

8 A covering analyst/s has received compensation from this company in the past 12 months.

9 A covering analyst/s or a member of his/her household has a financial interest in the securities of this company, as detailed below.

10 A covering analyst/s or a member of his/her household is an officer, director or supervisory board member of this company, as detailed below.

11 At the time of publication of this report, HSBC is a non-US Market Maker in securities issued by this company and/or in securities in respect of this company

12 As of 18 Jun 2020, HSBC beneficially held a net long position of more than 0.5% of this company's total issued share capital, calculated according to the SSR methodology.

13 As of 18 Jun 2020, HSBC beneficially held a net short position of more than 0.5% of this company's total issued share capital, calculated according to the SSR methodology.

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Additional disclosures

1 This report is dated as at 26 June 2020.

2 All market data included in this report are dated as at close 19 June 2020, unless a different date and/or a specific time of day is indicated in the report.

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