

Company Report

China Merchants Securities (HK) Co., Ltd. Hong Kong Equity Research

GSX (GSX US)

4Q20 in-line; Battling growth deceleration

- GSX 4Q20 revenue grew 136% yoy, non-GAAP net loss reached RMB554mn, driving by continued high marketing expenses, in-line
- Adj. 1Q21 revenue growth guidance of 62-65% yoy, though Mgmt. guides better growth in 2Q21, deceleration faster than anticipated
- Growth deceleration amid intense competition are key impediments; Maintain SELL

4Q20 results in-line

GSX reported 4Q20 (fall Q) revenue of RMB2.2bn (+136% yoy). K-12 segment revenue +156% yoy and FPI segment revenue +53% yoy. Non-GAAP operating loss reached RMB623mn (vs. -RMB921mn in 3Q20) and Non-GAAP net loss reached RMB554mn (vs. -RMB864mn in 3Q20), in-line with our expectation. GSX's total liquidity balance (cash +ST investments + LT investment) reached RMB8.2bn in 4Q20 (vs. RMB2.1bn in 3Q20), boosted by its USD870mn (RMB5.7bn) share placement in Dec 2020. Despite the competitive challenges, we believe the company has the war chest for a prolonged race, making medium term industry consolidation elusive.

Guidance lifts confidence for 1H at the margin

Management guides 1Q21 net revenue growth of 40-43% yoy, though adjusting for later CNY this year, resulting in shorter spring semester, growth should be around 62-65% yoy. Moreover, some of the spring program revenue will also spill over to 2Q21, overall management guides 2Q21 growth to improve over that of 1Q21, with full year target of 70-80% yoy. Gross margin also targeted to maintain at 70% (vs. 75% for 2020) as GSX plans to continue to hire more tutors (currently c.15,000 tutors, GSX plans to recruit 10,000 more tutors in 2021), as well as increase performance compensations for better teaching quality. The channels' diversification in marketing/customer acquisition will be key, as management is studying MCN and offline methods.

Tough road ahead: deceleration amid competition

We maintain SELL rating on GSX, as we are concerned about its growth deceleration (Figure 1) and profit pressure in conjunction with a relatively rich valuation of 12x FY21E P/S. Although the share price has pulled back 20% since our sell downgrade on Jan 29, 2021, we think there are sufficient headwinds in 2021 for further de-rating. We revised down our FY21/22E revenue 3%. We maintained our next 12-mo TP at USD62, based on 8x P/S (unchanged). Our TP implies 9x/6x FY21/22E P/S.

Financials

Year ended 31 Dec (RMB mn)	FY19	FY20	FY21E	FY22E	FY23E
Revenue	2,115	7,125	11,653	16,596	21,352
yoy	432%	237%	64%	42%	29%
Gross profit	1,579	5,362	8,157	11,731	15,306
yoy	520%	240%	52%	44%	30%
Non-GAAP OP	276	-1,517	-1,191	-598	583
yoy	1001%	n.a.	n.a.	n.a.	n.a.
Core net income	237	-1,154	-1,150	-563	637
yoy	n.a.	n.a.	n.a.	n.a.	n.a.
Core EPADS (RMB)	1.13	-4.82	-4.74	-2.32	2.62
P/E (x)	583.6	n.a.	n.a.	n.a.	217.2
P/S (x)	65.4	19.4	11.9	8.3	6.5
ROE	10%	-20%	-14%	-9%	0%

Sources: Company data, CMS (HK) estimates; share price as of Mar 4, 2021.

Tommy WONG Crystal LI
+852 3189 6634 +852 3189 6122
tommywong@cmschina.com.hk crystalli@cmschina.com.hk

WHAT'S NEW

4Q20 results briefing; Earnings forecast change

SELL

Previous	SELL
Price	USD84
12-month Target Price (Potential up/downside)	USD62 (-26%)
Previous	USD62

Price Performance



Source: Bloomberg, Share price as of War 4, 2021
% 1m 6m 12m
GSX US (3.4) 4.9 101.1
MXCN (7.0) 14.7 36.1

Sector: Education	
Hang Seng Index (Mar 4, 2021)	29,237
HSCEI (Mar 4, 2021)	11,326
Key Data	
52-week range (USD)	27.06 - 149.05
Market cap (USD mn)	21,377
Avg. daily volume (mn)	4.34
BVPS (RMB)	4.65
Shareholding Structure	
Larry Xiangdong Chen	46.1%
Other shareholders	17.7%
No. of shares outstanding (mn)	158
% outstanding	36.2%
52-week range (USD) Market cap (USD mn) Avg. daily volume (mn) BVPS (RMB) Shareholding Structure Larry Xiangdong Chen Other shareholders No. of shares outstanding (mn)	21,377 4.34 4.65 46.1% 17.7%

Sources: Company data, Bloomberg

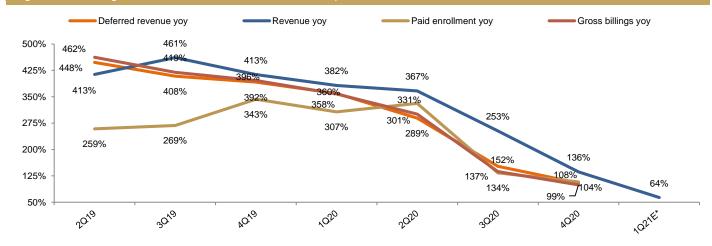
Related Research

- 1. GSX (GSX US) Overvalued driven by short squeeze attempt; Down to SELL (SELL) (Jan 29, 2021)
- GSX (GSX US) Turbulence ahead after smooth lift-off (NEUTRAL) (Nov 26, 2020)



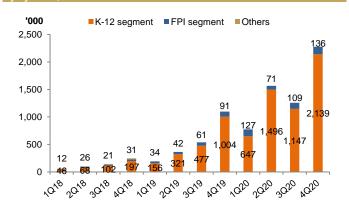
Focus charts

Figure 1: GSX's growth deceleration faster than our expectation



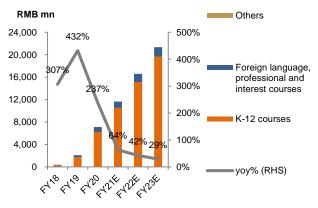
Sources: Company data, CMS (HK); *1Q21E revenue yoy growth based on mean mgmt. guidance, adjusted for seasonal factor

Figure 2: GSX's paid enrollment increased by 108% yoy to 2,275k in 4Q20



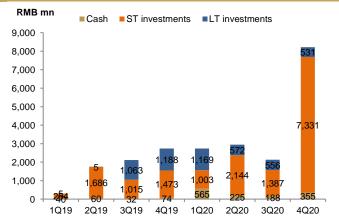
Sources: Company data, CMS (HK) estimates

Figure 3: GSX's revenue to grow at 35% FY21-23E CAGR driven by K12 tutoring segments



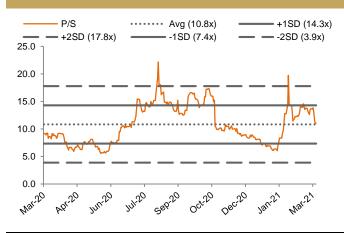
Sources: Company data, CMS (HK)

Figure 4: GSX maintains solid total liquidity of RMB8.2bn as of 4Q20



Sources: Company data, CMS (HK)

Figure 5: GSX's next 12-mo P/S range



Sources: Bloomberg, Company data, CMS (HK) estimates



RMB mn	3Q19	4Q19	1Q20	2Q20	3Q20	4Q20	3Q20	4Q20	4Q20	CMS fo	orecast		nberg ensus
As of	Sep-30	Dec-31	Mar-31	Jun-30	Sep-30	Dec-31	yoy	yoy	qoq	4Q20	diff	4Q20	dif
Net revenues	557	935	1,298	1,650	1,966	2,211	253%	136%	12%	2,105	5%	2,131	4%
Gross profit	400	739	1,014	1,290	1,464	1,595	266%	116%	9%	1,537	4%	1,573	1%
OP - as reported	-11	168	92	-161	-990	-696	n.a.	n.a.	n.a.	-653	n.a.	-728	n.a.
NP - as reported	-5	168	148	19	-933	-627	n.a.	n.a.	n.a.	-578	n.a.	-624	n.a.
Non-GAAP Op income	7	191	135	-107	-921	-623	n.a.	n.a.	n.a.	-579	n.a.	-492	n.a.
Non-GAAP Net income	13	191	191	73	-864	-554	n.a.	n.a.	n.a.	-505	n.a.	-559	n.a.
Margins													
GPM	72%	79%	78%	78%	74%	72%	2.6 ppt	-6.9 ppt	-2.3 ppt	73%	-0.9 ppt	74%	-1.7 ppt
OPM	-2%	18%	7%	-10%	-50%	-31%	n.a.	n.a.	n.a.	-31%	n.a.	-34%	n.a.
NPM	-1%	18%	11%	1%	-47%	-28%	n.a.	n.a.	n.a.	-27%	n.a.	-29%	n.a.
Non-GAAP OPM	1%	20%	10%	-6%	-47%	-28%	n.a.	n.a.	n.a.	-27%	n.a.	-23%	n.a.
Non-GAAP NPM	2%	20%	15%	4%	-44%	-25%	n.a.	n.a.	n.a.	-24%	n.a.	-26%	n.a.
As of revenue													
Selling and marketing	59%	47%	58%	73%	105%	81%	45.3 ppt	34.1 ppt	-23.2 ppt	84%	-2.7 ppt		
R&D	10%	9%	8%	8%	11%	12%	1 ppt	3.5 ppt	1.2 ppt	11%	1.4 ppt		
G&A	4%	5%	5%	6%	9%	10%	4.8 ppt	4.9 ppt	0.8 ppt	9%	0.8 ppt		
Gross billings	880	1,579	1,374	2,401	2,086	3,147	137%	99%	51%				
Cash	32	74	565	225	188	355	486%	380%	89%				
ST investments	1,015	1,473	1,003	2,144	1,387	7,331	37%	398%	428%				
LT investments	1,063	1,188	1,169	572	556	531	-48%	-55%	-4%				
Total liquidity	2,110	2,736	2,737	2,942	2,131	8,217	1%	200%	286%				
OCF	288	739	118	528	-679	636	n.a.	-14%	n.a.				



RMB mn	FY17	FY18	FY19	FY20	FY19	FY20	CMS for	ecast	Bloom Conse	
As of	Dec 31	Dec 31	Dec 31	Dec 31	yoy	yoy	FY20	diff	FY20	diff
Net revenues	98	397	2,115	7,125	432%	237%	7,019	2%	7,044	1%
Gross profit	73	255	1,579	5,362	520%	240%	5,304	1%	5,368	0%
OP - as reported	-92	19	216	-1,755	1026%	n.a.	-1,712	n.a.	-1,608	n.a.
NP - as reported	-126	-19	188	-1,393	n.a.	n.a.	-1,344	n.a.	-1,282	n.a.
Non-GAAP Op income	-87	25	276	-1,517	1001%	n.a.	-1,472	n.a.	-1,684	n.a.
Non-GAAP Net income	-120	-13	248	-1,154	n.a.	n.a.	-1,105	n.a.	-1,109	n.a.
Margins:										
GPM	74%	64%	75%	75%	10.6 ppt	0.6 ppt	76%	-0.3 ppt	76%	-0.9 ppt
OPM	-95%	5%	10%	-25%	5.4 ppt	-34.8 ppt	-24%	-0.2 ppt	-23%	-1.8 ppt
NPM	-129%	-5%	9%	-20%	13.7 ppt	-28.4 ppt	-19%	-0.4 ppt	-18%	-1.4 ppt
Non-GAAP OPM	-89%	6%	13%	-21%	6.7 ppt	-34.3 ppt	-21%	-0.3 ppt	-24%	2.6 ppt
Non-GAAP NPM	-123%	-3%	12%	-16%	15.1 ppt	-27.9 ppt	-16%	-0.5 ppt	-16%	-0.5 ppt
As of revenue										
Selling and marketing	77%	31%	49%	82%	18.6 ppt	32.4 ppt	82%	-0.8 ppt		
R&D	54%	19%	10%	10%	-8.6 ppt	0.3 ppt	10%	0.5 ppt		
G&A	38%	10%	5%	8%	-4.8 ppt	2.7 ppt	8%	0.3 ppt		



			\sim	115-		
	III C	ж.		x e	Parnings	revision
1 10	ulc	Ο.	$\cup \cup \prime$	\sim	Carrillings	

		FY21E			FY22E	
RMB mn	Previous	Revised	Change	Previous	Revised	Change
Net revenues	12,042	11,653	-3%	17,183	16,596	-3%
Gross profit	9,014	8,157	-10%	13,019	11,731	-10%
Selling expenses	-8,428	-7,791	n.a.	-11,685	-10,776	n.a.
R&D expenses	-1,018	-1,113	n.a.	-1,212	-1,189	n.a.
G&A expenses	-810	-817	n.a.	-896	-862	n.a.
Operating income	-1,242	-1,564	n.a.	-774	-1,096	n.a.
Net (loss) income after minority	-1,123	-1,523	n.a.	-679	-1,061	n.a.
Non-GAAP operating income	-856	-1,191	n.a.	-258	-598	n.a.
Non-GAAP net income after minority	-738	-1,150	n.a.	-163	-563	n.a.
EPADS (RMB)	-4.71	-6.28	n.a.	-2.85	-4.38	n.a.
Non-GAAP EPADS (RMB)	-3.09	-4.74	n.a.	-0.68	-2.32	n.a.
Margins						
GPM	74.9%	70.0%	-4.9ppt	75.8%	70.7%	-5.1ppt
OPM	-10.3%	-13.4%	-3.1ppt	-4.5%	-6.6%	-2.1ppt
NPM	-9.3%	-13.1%	-3.7ppt	-4.0%	-6.4%	-2.4ppt
Non-GAAP OPM	-7.1%	-10.2%	-3.1ppt	-1.5%	-3.6%	-2.1ppt
Non-GAAP NPM	-6.1%	-9.9%	-3.7ppt	-1.0%	-3.4%	-2.4ppt
As of revenue						
Selling and marketing	70.0%	66.9%	-3.1ppt	68.0%	64.9%	-3.1ppt
R&D	8.5%	9.6%	1.1ppt	7.1%	7.2%	0.1ppt
G&A	6.7%	7.0%	0.3ppt	5.2%	5.2%	0ppt



		Actua	al data				Foreca	st data		
RMB mn	1Q20	2Q20	3Q20	4Q20	1Q21E	2Q21E	3Q21E	4Q21E	1Q22E	2Q22E
Revenue	1,298	1,650	1,966	2,211	1,859	2,698	3,433	3,664	2,744	3,977
Gross profit	1,014	1,290	1,464	1,595	1,301	1,889	2,403	2,565	1,928	2,804
Selling and marketing	-757	-1,205	-2,056	-1,798	-1,301	-1,889	-2,403	-2,198	-1,866	-2,704
R&D expenses	-99	-140	-220	-275	-204	-270	-309	-330	-220	-278
G&A expenses	-66	-106	-177	-218	-167	-189	-223	-238	-151	-207
Non-GAAP GP	1,028	1,305	1,481	1,614	1,317	1,911	2,431	2,595	1,949	2,835
Non-GAAP OP	135	-107	-921	-623	-312	-372	-422	-84	-226	-266
Non-GAAP NP	191	73	-864	-554	-305	-363	-411	-70	-219	-256
yoy										
Revenue	382%	367%	253%	136%	43%	63%	75%	66%	48%	47%
Non-GAAP GP	448%	408%	265%	117%	28%	46%	64%	61%	48%	48%
Non-GAAP OP	189%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Non-GAAP NP	786%	223%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Margin										
GPM - as reported	78.2%	78.1%	74.4%	72.1%	70.0%	70.0%	70.0%	70.0%	70.3%	70.5%
Non-GAAP GPM	79.2%	79.1%	75.4%	73.0%	70.8%	70.8%	70.8%	70.8%	71.0%	71.3%
Non-GAAP OPM	10.4%	-6.5%	-46.9%	-28.2%	-16.8%	-13.8%	-12.3%	-2.3%	-8.3%	-6.7%
Non-GAAP NPM	14.7%	4.4%	-43.9%	-25.1%	-16.4%	-13.5%	-12.0%	-1.9%	-8.0%	-6.4%
Revenue by segment										
K-12 courses	1,120	1,385	1,757	1,975	1,646	2,354	3,163	3,358	2,469	3,532
FPI	174	260	203	234	209	338	265	304	271	440
Others	4	5	5	2	4	5	5	2	4	5
yoy										
K-12 courses	448%	412%	283%	156%	47%	70%	80%	70%	50%	50%
FPI	187%	238%	125%	53%	20%	30%	30%	30%	30%	30%
Others	-6%	-23%	-30%	-78%	0%	0%	0%	0%	0%	0%



					CMS			3-mth		P/E (x)		PEG*	P/S	s (x)	PSG*	Sales CAGR (%)	EPS CAG (%)
Company	CN name	Ticker	Price (local currency)	Rating	TP(Local currency)	Up/(Dn) side (%)	Mkt cap (USDm)	avg t/o (USDm)	FY20	FY21E	FY22E	FY21E	FY21E	FY22E	FY21E	2020-2022 CAGR	2020 202: CAG
HSI			29,237						n.a.	13.0	11.4	n.a.	1.8	1.6	n.a.	n.a.	n.a.
HSCEI			11,326						n.a.	10.8	9.6	n.a.	1.2	1.0	n.a.	n.a.	n.a.
Offline tutoring - Ch	ina																
NEW ORIENTAL	新东方	EDU US 9901 HK	176.7 1,430.0	BUY	220.0 1,780.1	24.5	29,848	184.3	60.4	54.9	37.2	1.9	7.3	5.4	0.4	20.9	28.
TAL	好未来	TAL US	75.1	NEUTRAL	72.0	-4.2	45,097	245.8	157.7	427.5	80.6	14.2	10.4	7.5	0.3	35.6	30.
OFFCN	中公教育	002607 CH	32.8	NR	n.a.	n.a.	31,240	92.8	79.2	58.4	43.4	1.7	11.8	9.0	0.4	32.2	35.
EAST	东方	667 HK	17.2	NR	n.a.	n.a.	4,778	12.1	44.9	27.0	21.9	0.6	6.3	5.3	0.3	23.2	45.
SCHOLAR	思考乐	1769 HK	12.8	NR	n.a.	n.a.	835	3.6	40.7	27.0	20.5	0.6	4.5	3.3	0.1	41.0	42.
ONLY	昂立	600661 CH	14.7	NR	n.a.	n.a.	657	0.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a
PUXIN	朴新	NEW US	6.3	NR	n.a.	n.a.	545	3.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	98.
ONESMART	精锐	ONE US	3.1	NR	n.a.	n.a.	494	1.1	n.a.	n.a.	20.1	n.a.	0.8	0.6	0.0	22.5	n.a
RISE	瑞思英语	REDU US	5.8	NR	n.a.	n.a.	324	0.2	n.a.	11.2	9.1	n.a.	1.3	1.1	0.0	42.8	n.a
BESTSTUDY	卓越	3978 HK	2.7	NR	n.a.	n.a.	287	0.2	14.9	9.0	6.6	0.2	0.8	0.7	0.0	24.9	50
Online tutoring - Ch	ina																
KOOLEARN	新东方在线	1797 HK	20.1	NEUTRAL	UR	n.a.	2,602	22.4	n.a.	n.a.	n.a.	n.a.	10.7	6.2	0.2	58.1	n.a
GSX	跟谁学	GSX US	84.0	SELL	62.0	-26.1	21,377	538.2	n.a.	n.a.	n.a.	n.a.	11.9	8.3	0.2	52.6	n.a
YOUDAO	有道	DAO US	30.1	NR	n.a.	n.a.	3,734	20.4	n.a.	n.a.	183.3	n.a.	2.6	2.0	0.1	41.6	n.a
51 TALK	51 Talk	COE US	23.3	NR	n.a.	n.a.	502	0.9	20.8	16.2	n.a.	n.a.	1.3	n.a.	n.a.	n.a.	n.a
CDEL	正保远程教育	DL US	9.7	NR	n.a.	n.a.	330	0.2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a
SUNLAND	尚德机构	STG US	1.2	NR	n.a.	n.a.	200	2.4	n.a.	n.a.	n.a.	n.a.	0.6	n.a.	n.a.	n.a.	n.a
LIULISHUO	流利说	LAIX US	2.2	NR	n.a.	n.a.	110	19.8	n.a.	n.a.	n.a.	n.a.	0.7	0.6	0.1	7.7	n.
Education (US listed	d Non-China)																
PEARSON		PSO US	10.6	NR	n.a.	n.a.	7,967	3.5	27.2	21.5	19.4	1.0	1.6	1.6	0.5	3.1	21
GRAND		LOPE US	100.9	NR	n.a.	n.a.	4,728	31.3	16.7	15.4	13.6	1.4	4.7	4.3	0.5	8.6	10
GRAHAM		GHC US	566.8	NR	n.a.	n.a.	2,835	12.7	19.7	12.9	15.8	0.7	0.8	0.8	0.2	4.7	18
_AUREATE		LAUR US	13.6	NR	n.a.	n.a.	2,704	12.5	n.a.	306.0	79.7	n.a.	2.6	2.2	0.2	10.6	(81
STRATEGIC		STRA US	80.1	NR	n.a.	n.a.	1,969	19.6	13.5	11.4	n.a.	n.a.	1.6	n.a.	n.a.	n.a.	n.
ADTALEM		ATGE US	38.0	NR	n.a.	n.a.	1,907	19.2	n.a.	13.0	11.3	1.2	1.7	1.4	0.2	8.3	11
< 12		LRN US	24.4	NR	n.a.	n.a.	1,012	18.9	37.8	15.9	18.5	0.4	0.7	0.7	0.0	13.5	40
HOUGHTON		HMHC US	6.1	NR	n.a.	n.a.	766	10.4	n.a.	n.a.	n.a.	n.a.	0.7	0.7	0.2	4.3	n.
Average - Offline tu	toring - China								56.8	76.9	26.6	2.7	4.8	3.6	0.2	27.0	41
Average - Online tu	oring - China								20.8	16.2	183.3	n.a.	4.6	4.3	0.1	40.0	n.a
Average - Tutoring	Non-China								23.0	56.6	26.4	0.9	1.8	1.7	0.3	7.6	3.
Average (all)									41.1	64.2	36.3	2.0	3.7	3.1	0.2	22.8	25

Sources: Company data, CMS (HK) estimates; share price as of Mar 4, 2021. Note: All information of Non-rated stocks was sourced from Bloomberg. *PEG is calculated by FY21E P/E divided by FY20-22E EPS CAGR, *PSG is calculated by FY21E P/S divided by FY20-22E sales CAGR



Financial Summary Balance Sheet

Dalatice Stieet					
(RMB mn)	FY19	FY20	FY21E	FY22E	FY23E
Year end	Dec 31				
Cash and cash equivalents	74	355	1,990	2,430	3,838
Short-term investments	1,473	7,331	5,865	6,452	7,097
Other current assets	261	771	978	1,111	1,267
Total current assets	1,809	8,457	8,833	9,993	12,202
Property, equipment and software, net	82	704	815	802	788
Intangible assets & Goodwill	0	29	32	35	39
Long-term investments	1,188	531	531	531	531
Other non-current assets	315	964	1,061	1,167	1,284
Total non-current assets	1,586	2,229	2,439	2,535	2,642
Total assets	3,395	10,686	11,272	12,527	14,843
Deferred revenue	1,332	2,725	4,482	6,383	8,212
Other current liabilities	305	1,473	1,738	2,056	2,438
Total current liabilities	1,637	4,197	6,220	8,439	10,650
Deferred revenue	6	9	10	11	12
Other non-current liabilities	194	749	835	931	1,039
Total non-current liabilities	200	759	845	942	1,051
Total liabilities	1,837	4,956	7,065	9,381	11,701
Total shareholders' equity	1,557	5,730	4,207	3,146	3,142
Total liabilities, mezzanine equity and shareholders' equity	3,395	10,686	11,272	12,527	14,843
Net cash/(debt)*	1,547	7,686	7,855	8,881	10,935

(RMB mn) FY19 Dec 31 FY20 Dec 31 FY21E Dec 31 PC23E Dec 31	Profit & Loss Statemer	nt				
Net revenues 2,115 7,125 11,653 16,596 21,352 Cost of revenue -536 -1,763 -3,496 -4,865 -6,046 Gross profit 1,579 5,362 8,157 11,731 15,306 Selling expenses -1,041 -5,816 -7,791 -10,776 -13,119 R&D expenses -212 -734 -1,113 -1,189 -1,251 G&A expenses -110 -567 -817 -862 -994 Operating income 216 -1,755 -1,564 -1,096 -57 Interest income 9 3 8 11 14 Net other income 6 254 49 46 39 Realized gains from investments 11 70 0 0 0 Impairment loss on equity method investments 11 70 0 0 0 Pre-tax income 242 -1,428 -1,508 -1,039 -5 Income tax benefits (expenses) <	(RMB mn)	FY19	FY20	FY21E	FY22E	FY23E
Cost of revenue -536 -1,763 -3,496 -4,865 -6,046 Gross profit 1,579 5,362 8,157 11,731 15,306 Selling expenses -1,041 -5,816 -7,791 -10,776 -13,119 R&D expenses -212 -734 -1,113 -1,189 -1,251 G&A expenses -110 -567 -817 -862 -994 Operating income 216 -1,755 -1,564 -1,096 -57 Interest income 9 3 8 11 14 Net other income 6 254 49 46 39 Realized gains from investments 11 70 0 0 0 Impairment loss on equity method investment 0 0 0 0 0 Pre-tax income 242 -1,428 -1,508 -1,039 -5 Income tax benefits (expenses) -17 35 -15 -22 1 (Loss) income from equity method investments </td <td>Year end</td> <td>Dec 31</td> <td>Dec 31</td> <td>Dec 31</td> <td>Dec 31</td> <td>Dec 31</td>	Year end	Dec 31	Dec 31	Dec 31	Dec 31	Dec 31
Gross profit 1,579 5,362 8,157 11,731 15,306 Selling expenses -1,041 -5,816 -7,791 -10,776 -13,119 R&D expenses -212 -734 -1,113 -1,189 -1,251 G&A expenses -110 -567 -817 -862 -994 Operating income 216 -1,755 -1,564 -1,096 -57 Interest income 9 3 8 11 14 Net other income 6 254 49 46 39 Realized gains from investments 11 70 0 0 0 Impairment loss on equity method investment 0 0 0 0 0 0 Pre-tax income 242 -1,428 -1,508 -1,039 -5 Income tax benefits (expenses) 17 35 -15 -22 1 (Loss) income from equity method investments 1 0 0 0 0 Net (loss) income	Net revenues	2,115	7,125	11,653	16,596	21,352
Selling expenses -1,041 -5,816 -7,791 -10,776 -13,119 R&D expenses -212 -734 -1,113 -1,189 -1,251 G&A expenses -110 -567 -817 -862 -994 Operating income 216 -1,755 -1,564 -1,096 -57 Interest income 9 3 8 11 14 Net other income 6 254 49 46 39 Realized gains from investments 11 70 0 0 0 Impairment loss on equity method investment 0 0 0 0 0 Pre-tax income 242 -1,428 -1,508 -1,039 -5 Income tax benefits (expenses) -17 35 -15 -22 1 (Loss) income from equity method investments 1 0 0 0 0 Net (loss) income after minority 188 -1,393 -1,523 -1,061 -4 Net (loss) income after	Cost of revenue	-536	-1,763	-3,496	-4,865	-6,046
R&D expenses -212 -734 -1,113 -1,189 -1,251 G&A expenses -110 -567 -817 -862 -994 Operating income 216 -1,755 -1,564 -1,096 -57 Interest income 9 3 8 11 14 Net other income 6 254 49 46 39 Realized gains from investments 11 70 0 0 0 Impairment loss on equity method investment 1 70 0 0 0 Pre-tax income 242 -1,428 -1,508 -1,039 -5 Income tax benefits (expenses) -17 35 -15 -22 1 (Loss) income from equity method investments 1 0 0 0 0 0 Net (loss) income 227 -1,393 -1,523 -1,061 -4 Net (loss) income after minority 188 -1,393 -1,523 -1,061 -4 Non-GAAP gro	Gross profit	1,579	5,362	8,157	11,731	15,306
G&A expenses -110 -567 -817 -862 -994 Operating income 216 -1,755 -1,564 -1,096 -57 Interest income 9 3 8 11 14 Net other income 6 254 49 46 39 Realized gains from investments 11 70 0 0 0 Impairment loss on equity method investments 11 70 0 0 0 Pre-tax income 242 -1,428 -1,508 -1,039 -5 Income tax benefits (expenses) -17 35 -15 -22 1 (Loss) income from equity method investments 1 0 0 0 0 Net (loss) income 227 -1,393 -1,523 -1,061 -4 Net (loss) income after minority 188 -1,393 -1,523 -1,061 -4 Non-GAAP items: 8 -1,393 -1,523 -1,061 -4 Non-GAAP operating income	Selling expenses	-1,041	-5,816	-7,791	-10,776	-13,119
Operating income 216 -1,755 -1,564 -1,096 -57 Interest income 9 3 8 11 14 Net other income 6 254 49 46 39 Realized gains from investments 11 70 0 0 0 Impairment loss on equity method investments 0 0 0 0 0 0 Pre-tax income 242 -1,428 -1,508 -1,039 -5 Income tax benefits (expenses) -17 35 -15 -22 1 (Loss) income from equity method investments 1 0 0 0 0 0 Net (loss) income 227 -1,393 -1,523 -1,061 -4 Net (loss) income after minority 188 -1,393 -1,523 -1,061 -4 SBC 60 238 373 498 641 Non-GAAP items: 1,595 5,429 8,254 11,860 15,473 Non-	R&D expenses	-212	-734	-1,113	-1,189	-1,251
Interest income 9 3 8 11 14 Net other income 6 254 49 46 39 Realized gains from investments 11 70 0 0 0 Impairment loss on equity method investment 17 70 0 0 0 Impairment loss on equity method investment 17 35 -15 -22 1 Income tax benefits (expenses) -17 35 -15 -22 1 (Loss) income from equity method investments 1 0 0 0 0 Net (loss) income from equity method investments 1 0 0 0 0 Net (loss) income after minority 188 -1,393 -1,523 -1,061 -4 Net (loss) income after minority 188 -1,393 -1,523 -1,061 -4 SBC 60 238 373 498 641 Non-GAAP items: Non-GAAP gross profit 1,595 5,429 8,254 11,860 15,473 Non-GAAP operating income 276 -1,517 -1,191 -598 583 Non-GAAP net income after minority 248 -1,154 -1,150 -563 637 Non-GAAP adj. net income after minority 237 -1,154 -1,150 -563 637 EPADS (RMB) 0.90 -5.81 -6.28 -4.38 -0.02 Non-GAAP EPADS (RMB) 1.19 -4.82 -4.74 -2.32 2.62	G&A expenses	-110	-567	-817	-862	-994
Net other income 6 254 49 46 39 Realized gains from investments 11 70 0 0 0 Impairment loss on equity method investment 0 0 0 0 0 Pre-tax income 242 -1,428 -1,508 -1,039 -5 Income tax benefits (expenses) -17 35 -15 -22 1 (Loss) income from equity method investments 1 0 0 0 0 0 Net (loss) income 227 -1,393 -1,523 -1,061 -4 Net (loss) income after minority 188 -1,393 -1,523 -1,061 -4 SBC 60 238 373 498 641 Non-GAAP items: Non-GAAP gross profit 1,595 5,429 8,254 11,860 15,473 Non-GAAP operating income 276 -1,517 -1,191 -598 583 Non-GAAP adj. net income after minority 248 -1,154 -1,150	Operating income	216	-1,755	-1,564	-1,096	-57
Realized gains from investments	Interest income	9	3	8	11	14
Impairment loss on equity method investment 0	Net other income	6	254	49	46	39
Pre-tax income 242 -1,428 -1,508 -1,039 -5 Income tax benefits (expenses) -17 35 -15 -22 1 (Loss) income from equity method investments 1 0 0 0 0 Net (loss) income 227 -1,393 -1,523 -1,061 -4 Net (loss) income after minority 188 -1,393 -1,523 -1,061 -4 SBC 60 238 373 498 641 Non-GAAP items: Non-GAAP gross profit 1,595 5,429 8,254 11,860 15,473 Non-GAAP operating income 276 -1,517 -1,191 -598 583 Non-GAAP net income after minority 248 -1,154 -1,150 -563 637 Non-GAAP adj: net income after minority 237 -1,154 -1,150 -563 637 EPADS (RMB) 0.90 -5.81 -6.28 -4.38 -0.02 Non-GAAP EPADS (RMB) 1.19 -4.82 -4.74	Realized gains from investments	11	70	0	0	0
Income tax benefits (expenses)		0	0	0	0	0
Closs income from equity method 1 0 0 0 0 0	Pre-tax income	242	-1,428	-1,508	-1,039	-5
Net (loss) income 227 -1,393 -1,523 -1,061 -4 Net (loss) income after minority 188 -1,393 -1,523 -1,061 -4 SBC 60 238 373 498 641 Non-GAAP items: Non-GAAP gross profit 1,595 5,429 8,254 11,860 15,473 Non-GAAP operating income 276 -1,517 -1,191 -598 583 Non-GAAP net income after minority 248 -1,154 -1,150 -563 637 Non-GAAP adj. net income after minority 237 -1,154 -1,150 -563 637 EPADS (RMB) 0.90 -5.81 -6.28 -4.38 -0.02 Non-GAAP EPADS (RMB) 1.19 -4.82 -4.74 -2.32 2.62	Income tax benefits (expenses)	-17	35	-15	-22	1
Net (loss) income after minority 188 -1,393 -1,523 -1,061 -4 SBC 60 238 373 498 641 Non-GAAP items: Non-GAAP gross profit 1,595 5,429 8,254 11,860 15,473 Non-GAAP operating income 276 -1,517 -1,191 -598 583 Non-GAAP net income after minority 248 -1,154 -1,150 -563 637 Non-GAAP adj. net income after minority 237 -1,154 -1,150 -563 637 EPADS (RMB) 0.90 -5.81 -6.28 -4.38 -0.02 Non-GAAP EPADS (RMB) 1.19 -4.82 -4.74 -2.32 2.62		1	0	0	0	0
SBC 60 238 373 498 641 Non-GAAP items: Non-GAAP gross profit 1,595 5,429 8,254 11,860 15,473 Non-GAAP operating income 276 -1,517 -1,191 -598 583 Non-GAAP net income after minority 248 -1,154 -1,150 -563 637 Non-GAAP adj. net income after minority 237 -1,154 -1,150 -563 637 EPADS (RMB) 0.90 -5.81 -6.28 -4.38 -0.02 Non-GAAP EPADS (RMB) 1.19 -4.82 -4.74 -2.32 2.62	Net (loss) income	227	-1,393	-1,523	-1,061	-4
Non-GAAP items: Non-GAAP gross profit 1,595 5,429 8,254 11,860 15,473 Non-GAAP operating income 276 -1,517 -1,191 -598 583 Non-GAAP net income after minority 248 -1,154 -1,150 -563 637 Non-GAAP adj. net income after minority 237 -1,154 -1,150 -563 637 EPADS (RMB) 0.90 -5.81 -6.28 -4.38 -0.02 Non-GAAP EPADS (RMB) 1.19 -4.82 -4.74 -2.32 2.62	Net (loss) income after minority	188	-1,393	-1,523	-1,061	-4
Non-GAAP gross profit 1,595 5,429 8,254 11,860 15,473 Non-GAAP operating income 276 -1,517 -1,191 -598 583 Non-GAAP net income after minority 248 -1,154 -1,150 -563 637 Non-GAAP adj. net income after minority 237 -1,154 -1,150 -563 637 EPADS (RMB) 0.90 -5.81 -6.28 -4.38 -0.02 Non-GAAP EPADS (RMB) 1.19 -4.82 -4.74 -2.32 2.62	SBC	60	238	373	498	641
Non-GAAP operating income 276 -1,517 -1,191 -598 583 Non-GAAP net income after minority 248 -1,154 -1,150 -563 637 Non-GAAP adj. net income after minority 237 -1,154 -1,150 -563 637 EPADS (RMB) 0.90 -5.81 -6.28 -4.38 -0.02 Non-GAAP EPADS (RMB) 1.19 -4.82 -4.74 -2.32 2.62	Non-GAAP items:					
Non-GAAP net income after minority 248 -1,154 -1,150 -563 637 Non-GAAP adj. net income after minority 237 -1,154 -1,150 -563 637 EPADS (RMB) 0.90 -5.81 -6.28 -4.38 -0.02 Non-GAAP EPADS (RMB) 1.19 -4.82 -4.74 -2.32 2.62	Non-GAAP gross profit	1,595	5,429	8,254	11,860	15,473
Non-GAAP adj. net income after minority 237 -1,154 -1,150 -563 637 EPADS (RMB) 0.90 -5.81 -6.28 -4.38 -0.02 Non-GAAP EPADS (RMB) 1.19 -4.82 -4.74 -2.32 2.62	Non-GAAP operating income	276	-1,517	-1,191	-598	583
minority 237 -1,154 -1,150 -563 637 EPADS (RMB) 0.90 -5.81 -6.28 -4.38 -0.02 Non-GAAP EPADS (RMB) 1.19 -4.82 -4.74 -2.32 2.62	Non-GAAP net income after minority	248	-1,154	-1,150	-563	637
Non-GAAP EPADS (RMB) 1.19 -4.82 -4.74 -2.32 2.62		237	-1,154	-1,150	-563	637
` '	EPADS (RMB)	0.90	-5.81	-6.28	-4.38	-0.02
Non-GAAP adj. EPADS (RMB) 1.13 -4.82 -4.74 -2.32 2.62	Non-GAAP EPADS (RMB)	1.19	-4.82	-4.74	-2.32	2.62
	Non-GAAP adj. EPADS (RMB)	1.13	-4.82	-4.74	-2.32	2.62

Cashflow Statement

odomion otatomo	116				
(RMB mn)	FY19	FY20	FY21E	FY22E	FY23E
Year end	Dec 31				
Net (loss) income	227	-1,393	-1,523	-1,061	-4
Non-cash Adjustments	59	26	29	29	28
Changes in net operating assets	999	1,931	1,816	2,089	2,061
CFO	1,285	636	322	1,056	2,085
Investments	-2,444	-5,199	1,453	-601	-662
CAPEX	-61	-721	-140	-15	-15
Others	0	0	0	0	0
CFI	-2,505	-5,920	1,313	-616	-677
Amounts borrowed from related parties	0	0	0	0	0
Repayment to related parties	-34	0	0	0	0
Share issuance	1,280	5,565	0	0	0
CFF	1,246	5,565	0	0	0
Effect of exchange rate changes	14	0	0	0	0
Net increase in cash	41	281	1,635	440	1,408
Beginning cash	33	74	355	1,990	2,430
Ending cash	74	355	1,990	2,430	3,838

Financial ratios

	FY19	FY20	FY21E	FY22E	FY23E
Year end	Dec 31				
yoy					
Net revenues	432%	237%	64%	42%	29%
Gross profit	520%	240%	52%	44%	30%
Operating income	1026%	n.a.	n.a.	n.a.	n.a.
Net (loss) income	1053%	n.a.	n.a.	n.a.	n.a.
Net (loss) income after minority	n.a.	n.a.	n.a.	n.a.	n.a.
Non-GAAP items					
Non-GAAP gross profit	526%	240%	52%	44%	30%
Non-GAAP operating income	1001%	n.a.	n.a.	n.a.	n.a.
Non-GAAP net income after minority	n.a.	n.a.	n.a.	n.a.	n.a.
Non-GAAP adj. net income after minority	n.a.	n.a.	n.a.	n.a.	n.a.
Margins					
Gross profit	75%	75%	70%	71%	72%
Operating income	10%	-25%	-13%	-7%	0%
Net (loss) income	11%	-20%	-13%	-6%	0%
Net (loss) income after minority	9%	-20%	-13%	-6%	0%
Non-GAAP items					
Non-GAAP gross profit	75%	76%	71%	71%	72%
Non-GAAP operating income	13%	-21%	-10%	-4%	3%
Non-GAAP net income after minority	12%	-16%	-10%	-3%	3%
Non-GAAP adj. net income after minority	11%	-16%	-10%	-3%	3%
Effective tax rate	7%	2%	-1%	-2%	20%
Current ratio (x)	110%	201%	142%	118%	115%
Net cash/equity	99%	134%	187%	282%	348%
ROE	10%	-20%	-14%	-9%	0%
P/E (x)	583.6	n.a.	n.a.	n.a.	217.2
P/B (x)	88.8	24.1	32.9	44.0	44.0
P/S (x)	65.4	19.4	11.9	8.3	6.5
e and ST investments					

Sources: Company data, CMS (HK) estimates; *Net cash includes bank balance and ST investments



Investment Ratings

Industry Rating	Definition	
OVERWEIGHT	Expect sector to outperform the market over the next 12 months	
NEUTRAL	Expect sector to perform in-line with the market over the next 12 months	
UNDERWEIGHT	Expect sector to underperform the market over the next 12 months	
Company Rating	Definition	
BUY	Expect stock to generate 10%+ return over the next 12 months	
NEUTRAL	Expect stock to generate +10% to -10% over the next 12 months	
SELL	Expect stock to generate loss of 10%+ over the next 12 months	

Analyst Disclosure

The analysts primarily responsible for the preparation of all or part of the research report contained herein hereby certify that: (i) the views expressed in this research report accurately reflect the personal views of each such analyst about the subject securities and issuers; and (ii) no part of the analyst's compensation was, is, or will be directly or indirectly, related to the specific recommendations or views expressed in this research report.

Regulatory Disclosure

Please refer to the important disclosures on our website http://www.newone.com.hk/cmshk/gb/disclosure.html or http://www.cmschina.com.hk/Research/Disclosure.

Disclaimer

This document is prepared by China Merchants Securities (HK) Co Limited. The information contained herein has been obtained from or is based on sources believed to be reliable. China Merchant Securities (HK) Co Limited, its holding company or affiliated companies, or any of its or their directors, officers or employees (collectively "CMS") do not represent or warrant, expressly or impliedly, that it is accurate, correct or complete and it should not be relied upon. CMS will not accept any responsibility or liability whatsoever for any use of or reliance upon this document or any of the content thereof.

This document is for information purpose only. Neither the information nor opinion expressed shall be construed, expressly or impliedly, as an advice, offer or solicitation of an offer, invitation, advertisement, inducement, recommendation or representation of any kind or form whatsoever to buy or sell any security, financial instrument or any investment or other specific product. The securities, instruments or strategies discussed in this document may not be suitable for all investors, and certain investors may not be eligible to participate in some or all of them. Certain services and products are subject to legal restrictions and cannot be offered worldwide on an unrestricted basis and/or may not be eligible for sale to all investors. CMS is not registered as a broker-dealer in the United States and its products and services are not available to U.S. persons except as permitted under SEC Rule 15a-6.

Opinions, and associated estimates and forecasts, or any content and information in this document are only current as of the date of their publication and will be subject to change without prior notice. Past performance is not indicative of future performance. Estimates of future performance are based on assumptions that may not be realized. The analysis contained herein is based on numerous assumptions. Different assumptions could result in materially different results. Opinions expressed herein may differ or be contrary to those expressed by other business divisions or other members of CMS as a result of using different assumptions and/or criteria.

This document has been prepared without regard to the individual financial circumstances and investment objectives of the persons who receive it. Use of any information herein shall be at the sole discretion and risk of



the user. Investors are advised to independently evaluate particular investments and strategies, take financial and/or tax advice as to the implications (including tax) of investing in any of the securities or products mentioned in this document, and make their own investment decisions without relying on this publication.

CMS may have a long or short position, make markets, act as principal or agent, or engage in transactions in securities of companies referred to in this document and may also perform or seek to perform investment banking services or provide advisory or other services for those companies.

This document is for the use of intended recipients only and this document may not be reproduced, distributed or published in whole or in part for any purpose without the prior consent of CMS. CMS will not be liable for any claims or lawsuits from any third parties arising from the use or distribution of this document.

This document is for distribution only under such circumstances as may be permitted by applicable law. This document is not directed at you if CMS is prohibited or restricted by any legislation or regulation in any jurisdiction from making it available to you. In particular, this document is only made available to certain US persons to whom CMS is permitted to make available according to US securities laws, but cannot otherwise be made available, distributed or transmitted, whether directly or indirectly, into the US or to any US person.

In Hong Kong, this document is distributed by China Merchants Securities (HK) Co., Limited, which is a licensed corporation to carry on Type 1 (dealing in securities), Type 2 (dealing in futures), Type 4 (advising on securities), Type 6 (advising on corporate finance) and Type 9 (asset management) regulated activities under the Securities and Futures Ordinance (Chapter 571).

In South Korea, professional clients can get copies of this document (upon request) through China Merchants Securities (Korea) Co., Limited

In the United Kingdom, this document is distributed by China Merchants Securities (UK) Limited. This document is for distribution only to persons who: (i) are persons falling within the definition of "Investment Professionals" pursuant to Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Financial Promotion Order"); (ii) are persons falling within Article 49(2)(a) to (d) ("High Net Worth Companies, Unincorporated Associations, etc.") of the Financial Promotion Order; or (iii) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000) may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "Relevant Persons"). This document is directed only at relevant persons and must not be acted on or relied on by persons who are not Relevant Persons. Any investment or investment activity to which this document relates is available only to Relevant Persons and will be engaged in only with Relevant Persons.

If there is any inconsistency or ambiguity between the English version and the Chinese version of this disclaimer, the English version shall prevail.

© China Merchant Securities (HK) Co., Limited. All rights reserved.

Hong Kong

China Merchants Securities (HK) Co., Ltd.
Address: 48/F, One Exchange Square, Central, Hong Kong
Tel: +852 3189 6888 Fax: +852 3101 0828