

China

ADD (no change)

Consensus ratings*: Buy 3 Hold 4 Sell 1

Current price:	US\$1.55
Target price:	US\$3.80
Previous target:	US\$4.40
Up/downside:	145.2%
CGS-CIMB / Consensus:	130.3%
Reuters:	OCFT.A
Bloomberg:	OCFT US
Market cap:	US\$604.5m
Average daily turnover:	US\$4.26m
Current shares o/s:	7,800m
Free float:	60.6%

*Source: Bloomberg

Key changes in this note

- FY22F EPS raised by 2%.
- FY23F EPS cut by 8%.
- FY24F EPS cut by 526%.



Source: Bloomberg

Price performance	1M	3M	12M
Absolute (%)	-24	-39.9	-91.6
Relative (%)	-24.4	-33	-105.5

Major shareholders	% held
Ping An Group	34.3
SBI StellarS and its affiliated entities	5.1

Analyst(s)


Michael CHANG, CFA

T (852) 2539 1323

E michael.chang@cgs-cimb.com

OneConnect Financial Tech

Third party revenue challenges

- While FY21 net loss narrowed 5% yoy, third party revenue mix remains at its post 2018 IPO lows, with 4Q21 revenue mix a record low at 32.3%.
- OneConnect announced that it is looking to list in HK via a dual primary listing. It is also buying back up to 2% of its ordinary shares.
- Retain Add. We cut TP to US\$3.80 on broadly lower FY22F-24F EPS.

FY21 net loss narrows yoy

OneConnect reported FY21 net profit of Rmb1.3bn, down 5% yoy, and 4% better than our forecast. FY21 revenue growth yoy was 25%, in-line with its guidance given at 1H21 results briefing. FY21 revenue growth yoy was driven by cloud (+234%), risk management (+47%) and other (+257%) (Fig 1). 4Q21 revenue growth yoy was 19% yoy (3Q21: 21%), driven by cloud (+60%), risk management (92%) and other (+230%). 4Q21 revenue from third parties remains at a record low of 32.3% of total revenue (previous low was 32.4% in 2Q21), and well below FY24F target of over 50%.

Looking to list in HK via a dual primary listing

OneConnect announced during its analyst briefing that it is looking to list in Hong Kong (HK) by way of a dual primary listing. It emphasised that no new shares would be issued (in part due to its belief that the share price is very low) and is currently in talks with Hong Kong Exchange on its listing plans.

Announced a share buyback of up to 2% of shares outstanding

OneConnect also announced that it may repurchase up to 2% of its outstanding shares, commencing from its results date up until 30 Sep 2022. This stems from its belief that the shares are currently undervalued given the company's confidence in its own fundamentals, business outlook and its long-term strategies.

Reiterated its medium-term targets

OneConnect reiterated it remains on track to meet its medium-term targets by the end of 2024 (Fig 2). These include becoming the top three among its China peers in terms of revenue, third-party revenue comprising most of its revenue, premium customers exceeding 1,000 (FY21: 796), premium plus customers exceeding 500 (FY21: 212), premium customer net expansion rate (NER) of 100-120% (FY21: 96%). Its FY22F target is to grow third party revenue and achieve stable recurring revenue.

Reiterate Add rating; DCF-based TP cut from US\$4.40 to US\$3.80

Our TP (WACC: 14.2%) is cut from US\$4.4 to US\$3.8, given broadly lower FY22F-24F EPS, driven by lower revenue forecasts and an assumed break-even in early FY25F (previously late FY24F). Potential re-rating catalysts: regulatory approval to sell financial cloud services to banks & stronger third-party revenues. Key downside risks: unexpected additional adverse regulations, and Ping An Group reducing its technology spending.

Financial Summary

	Dec-20A	Dec-21A	Dec-22F	Dec-23F	Dec-24F
Revenue (Rmbm)	3,312	4,132	4,977	5,959	7,095
Net Profit (Rmbm)	(1,354)	(1,282)	(908)	(515)	(23)
Core EPS (Rmb)	(3.81)	(3.47)	(2.48)	(1.41)	(0.06)
Core EPS Growth	(28.1%)	(9.0%)	(28.5%)	(43.3%)	(95.5%)
FD Core P/E (x)	NA	NA	NA	NA	NA
Price To Sales (x)	1.05	0.87	0.72	0.60	0.50
DPS (Rmb)	-	-	-	-	-
Dividend Yield	0%	0%	0%	0%	0%
EV/EBITDA (x)	NA	NA	NA	NA	4.14
P/FCFE (x)	1.21	2.63	1.28	1.40	1.52
Net Gearing	(57.8%)	(42.9%)	(38.3%)	(40.0%)	(38.5%)
P/BV (x)	0.73	1.01	1.12	1.11	1.11
ROE	(28.3%)	(28.5%)	(25.2%)	(15.0%)	(0.7%)
% Change In Core EPS Estimates			2%	(8%)	(526%)
CGS-CIMB/Consensus EPS (x)			1.13	1.37	(6.27)

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Third party revenue challenges

Figure 1: FY21 revenue of OneConnect by source and type, versus CGS-CIMB Research Estimates

(Rmb m)	Actual	CGS-CIMB Research Estimate	Actual	% variance versus CGS-CIMB estimates	FY21F yoy
Revenue by customer:	FY21	FY21F	FY20		
Revenue from Ping An Group	2,317	2,451	1,727	-5%	34%
Revenue from Lufax	428	309	343	39%	25%
Revenue from third-party customers	1,388	1,379	1,242	1%	12%
Total	4,132	4,139	3,312	0%	25%
Revenue by business type:					
Implementation	734	785	852	-7%	-14%
Transaction-based and Support Services					
Business origination services	451	499	606	-10%	-26%
Risk management services	534	436	363	22%	47%
Operation support services	1,098	1,097	1,061	0%	3%
Cloud services platform	1,050	1,111	314	-5%	234%
Post-implementation support services	49	50	56	-1%	-11%
Others	217	160	61	36%	257%
Sub-total	3,399	3,354	2,460	1%	38%
Total	4,132	4,139	3,312	0%	25%

SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS

Figure 2: OneConnect reiterated its medium-term targets by the end of 2024

Medium term targets (by Details end-2024)

3rd party revenue comprises the majority of revenue
Top three revenue in China
Premium customers > 1000
Premium plus customers
Non-IFRS gross profit margin
Become profitable

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 3: OneConnect's premium customers and premium plus customers across time








	FY20	FY21	1H20	2H20	1H21	2H21
Premium customers	168	212	346	248	460	336
Premium plus customers	594	796	87	81	113	99
Growth yoy						
Premium customers		26%			33%	35%
Premium plus customers		34%			30%	22%

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 4: OneConnect's non-IFRS gross profit margin, net profits and third party revenue mix across time

	FY20	FY21	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21
Non-IFRS gross profit margin (%)	46.7%	42.1%	46.0%	47.5%	51.2%	42.8%	43.5%	42.3%	42.2%	40.8%
Net profits (Rmb m)	-1,354	-1,282	-415	-331	-243	-365	-305	-349	-270	-358
Third party revenue mix (%)	38%	34%	46%	37%	34%	36%	38%	32%	33%	32%

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Refinitiv ESG Scores	
      	
<p>ESG in a nutshell</p> <p>OneConnect scored a C- rating for its combined ESG score by Refinitiv in 2020, the same as in 2019. OneConnect, an associate of Ping An Insurance Group, has integrated ESG core concepts not only into its own business operations but has also promoted ESG development in other countries. In Feb 2021, OneConnect entered into a Memorandum of Understanding (MOU) with Singapore Exchange (SGX) to collaborate and build an environmental, social and governance (ESG) platform to facilitate and simplify the ESG disclosure processes for companies listed on SGX. OneConnect and SGX stated that the platform will help overcome common challenges faced by companies and investors when dealing with ESG information, including a lack of comparability, investors' changing demands, and an evolving regulatory landscape. OneConnect has also committed to empowering the good growth of small and microenterprises through techniques and product and service development. Together with Internet Finance Association of Small and Medium-sized Banks (IFAB), OneConnect built the IFAB trade financing network based on blockchain, connected banks and small and medium-sized enterprises (SMEs), promoted better service of financial institutions, and solved the problem for these SMEs who find it difficult and costly to be financed. Ping An believes in "tech for social good". We believe that OneConnect, as part of the Ping An ecosystem, will benefit from the synergy with the development of Ping An's own artificial intelligence-driven ESG framework in China.</p>	
<p>Keep your eye on</p> <p>A report letter from Yonglin research, which is a company that does not seem to exist, that seemingly circulated on social media in Aug 2021 stated that OneConnect forged its financial data from 2019, and over 200 of its 900 non-Ping An VIP clients (comprising Rmb700m) were 'made-up', according to the Securities Times in Aug 2021. OneConnect immediately responded on its WeChat account that the report letter is not true and the company has true and accurate financial statements.</p>	<p>Implications</p> <p>OneConnect subsequently announced on 5 Nov 2021 that its internal audit committee has completed an investigation and has found no evidence to support the allegations of the report letter released by Yonglin research. We think that therefore it is currently no longer an issue.</p>
<p>ESG highlights</p> <p>OneConnect's C- ESG score is at the bottom of the range of Refinitiv combined ESG scores of the stocks under our coverage (the range is B to C-). This is due to its relatively poor environmental score (D-), governance score (D+), resource use (D-) and social pillar score (C+).</p>	<p>Implications</p> <p>There seems to be significant scope for OneConnect to improve its ESG scores, especially given the extent that its parent, Ping An Group, seems to heavily focus on ESG. According to Ping An Group's 2020 sustainability report, its ESG rating of A from MSCI is the highest level for a financial company in China Mainland. Ping An Group also stated that its A- ESG rating from CDP (Carbon Disclosure Project) is also the highest level for a financial company in China Mainland.</p>
<p>Trends</p> <p>OneConnect's Refinitiv combined ESG score has been stable after its 2019 listing at C- in both 2019 and 2020. Its Social pillar score rose from C in 2019 to C+ in 2020. This was offset by its Governance pillar score, which dropped from D+ in 2019 to D in 2020. Its ESG Controversies score was A+ in both 2019 and 2020.</p>	<p>Implications</p> <p>We see scope for improvement of its ESG ratings, given how low some of these ratings are.</p>

SOURCES: CGS-CIMB RESEARCH, REFINITIV

Key changes to our estimates

We adjust our earnings per share (American Depositary Receipt) estimates for FY22F by +2%, and FY23F by -8% and FY24F by -526% (Fig 5), driven by broadly lower revenue forecasts. Also, we now have OneConnect breaking even in early FY25F, instead of late FY24F.

Figure 5: Key changes in our estimates

(Rmb m)	FY22F			FY23F			FY24F		
	Old	New	% change	Old	New	% change	Old	New	% change
Revenue	5,212	4,977	-4.5%	6,060	5,959	-1.7%	6,987	7,095	1.5%
Cost of revenue	-3,235	-3,131	-3.2%	-3,505	-3,605	2.9%	-3,723	-4,115	10.5%
Gross profit	1,976	1,846	-6.6%	2,555	2,354	-7.8%	3,264	2,980	-8.7%
R&D expenses	-1,561	-1,434	-8.1%	-1,608	-1,521	-5.4%	-1,685	-1,615	-4.2%
Selling & marketing expenses	-478	-540	13.0%	-425	-500	17.8%	-397	-467	17.6%
General & admin. expenses	-922	-839	-9.1%	-936	-851	-9.1%	-970	-862	-11.2%
Net impairment losses	-76	-47	-37.7%	-63	-36	-43.1%	-56	-28	-50.3%
Other income	58	14	-76.2%	58	14	-76.2%	58	14	-76.2%
Operating loss (EBIT)	-1,002	-1,000	-0.2%	-420	-541	28.9%	213	21	-90.2%
Finance costs - net	-110	-25	-77.5%	-151	-40	-73.5%	-205	-51	-75.2%
Share of losses of associate & JVs	-3	7	-312.5%	-3	5	-312.5%	-2	4	-312.5%
Loss before income tax	-1,115	-1,018	-8.7%	-573	-575	0.4%	6	-26	-497.3%
Tax	89	79	-10.9%	46	45	-1.9%	-1	2	-488.0%
Loss for the year	-1,026	-938	-8.6%	-527	-530	0.6%	6	-24	-498.1%
Minority Interests	37	31	-16.1%	17	16	-7.7%	0	1	-465.1%
Net loss/ profit	-989	-908	-8.3%	-510	-515	0.9%	6	-23	-499.1%
Other items									
Cash & cash equivalents	4,010	1,497	-62.7%	4,551	1,597	-64.9%	5,135	1,698	-66.9%
Total assets	11,410	9,867	-13.5%	12,670	10,572	-16.6%	14,072	11,392	-19.0%
Total liabilities	7,346	6,411	-12.7%	8,525	7,077	-17.0%	9,916	7,918	-20.1%
Total equity	4,064	3,455	-15.0%	4,145	3,495	-15.7%	4,156	3,474	-16.4%
Gross margin	37.9%	37.1%	-0.8 pts	42.2%	39.5%	-2.7 pts	46.7%	42.0%	-4.7 pts
EBIT margin	-19.2%	-20.1%	-0.9 pts	-6.9%	-9.1%	-2.1 pts	3.1%	0.3%	-2.8 pts
EBITDA margin	-12.5%	-10.2%	2.4 pts	-0.9%	-1.0%	-0.1 pts	8.7%	7.1%	-1.6 pts
Net profit margin	-19.0%	-18.2%	0.8 pts	-8.4%	-8.6%	-0.2 pts	0.1%	-0.3%	-0.4 pts
Revenue per ADS (Rmb)	13.36	13.61	1.8%	15.54	16.30	4.9%	17.92	19.40	8.3%
Earnings/ loss per ADS (Rmb)	-2.54	-2.48	2%	-1.31	-1.41	-8%	0.01	-0.06	-526%
Book value per ADS (Rmb)	10.17	9.33	-8.2%	10.36	9.43	-9.0%	10.38	9.37	-9.7%
EBIT (Rmb m)	-1,002	-1,000	-0.2%	-420	-541	28.9%	213	21	-90.2%
EBITDA (Rmb m)	-653	-506	-22.5%	-56	-60	7.2%	609	502	-17.6%
ROE	-24%	-25%	-1.5 pts	-13%	-15%	-2.3 pts	0%	-1%	-0.8 pts
Assets/ Equity ratio	2.8	2.9	1.7%	3.1	3.0	-1.0%	3.4	3.3	-3.1%
Dividend per ADS (Rmb)	0	0	n.a.	0	0	n.a.	0	0	n.a.
Effective tax rate	8.0%	7.8%	-0.2 pts	8.0%	7.8%	-0.2 pts	8.0%	7.8%	-0.2 pts
Total revenue growth	25.9%	20.4%	-5.5 pts	16.3%	19.7%	3.5 pts	15.3%	19.1%	3.7 pts
Total net profit growth	-26%	-29%	-3.5 pts	-48%	-43%	5.2 pts	-101%	-96%	5.6 pts
Diluted EPS growth	-26%	-28%	-2.8 pts	-48%	-43%	5.2 pts	-101%	-96%	5.6 pts
R&D/ total revenue (%)	30.0%	28.8%	-1.1 pts	26.5%	25.5%	-1.0 pts	24.1%	22.8%	-1.4 pts
Selling & marketing exp. / total revenue (%)	9.2%	10.8%	1.7 pts	7.0%	8.4%	1.4 pts	5.7%	6.6%	0.9 pts
General admin. expenses / total revenue (%)	17.7%	16.8%	-0.8 pts	15.5%	14.3%	-1.2 pts	13.9%	12.2%	-1.7 pts
Net impairment losses/ total revenue (%)	1.5%	1.0%	-50.7 bp	1.0%	0.6%	-44.0 bp	0.8%	0.4%	-41.3 bp
Financing costs/ average borrowings (%)	5.5%	4.9%	-51.9 bp	5.5%	4.9%	-51.9 bp	5.5%	4.9%	-51.9 bp

SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS

Valuation of OneConnect

Our discounted cash flow (DCF) based target price is US\$3.80, down from US\$4.40 previously (Fig 6). Our lower target price is driven by broadly lower FY22-24F EPS estimates, which translates into lower unlevered free cash flow over our 10-year forecast DCF period.

This results in a cut in our enterprise value of 12% and a 14% cut in our target price to US\$3.80.

Figure 6: Changes to our valuation

	Old	New	% change
Key assumptions			
Cost of debt	5.5%	5.5%	0.0 pts
Tax rate	25.0%	25.0%	0.0 pts
Cost of equity	18.5%	18.5%	0.0 pts
<i>of which:</i>			
Beta	1.94	1.94	0.0%
Risk free rate	3.0%	3.0%	0.0 pts
Equity risk premium	8.0%	8.0%	0.0 pts
Perpetual growth rate	5.0%	5.0%	0.0 pts
Mix of debt	30.2%	30.2%	0.0 pts
WACC	14.2%	14.2%	0.0 pts
Unlevered free cash flow (Rmb m)			
Year 1	-301	1,031	-442.9%
Year 2	-45	-349	668.3%
Year 3	-245	23	-109.4%
Year 4	306	525	71.5%
Year 5	770	890	15.6%
Year 6	1,040	1,068	2.7%
Year 7	1,331	1,217	-8.5%
Year 8	1,629	1,337	-17.9%
Year 9	1,920	1,442	-24.9%
Year 10	2,196	1,532	-30.2%
DCF-based valuation (Rmb m)			
Enterprise value	10,163	8,915	-12.3%
Debt	2,596.54	1,549.28	-40.3%
Cash	3,283.51	2,227.28	-32.2%
Net debt	-686.97	-678.00	-1.3%
Minority interests	92.16	65.51	-28.9%
Equity valuation	9,384	8,172	-12.9%
Number of ADS (million)	334	334	0.0%
Valuation per share (Rmb)	28.10	24.47	-12.9%
Assumed US\$/ Rmb exchange rate	6.45	6.45	0.0%
Hence target price of ADS (US\$)	4.40	3.80	-13.6%
Current share price (US\$)		1.55	
Share price upside		145%	

SOURCES: CGS-CIMB RESEARCH ESTIMATES

Key re-rating catalysts are regulatory approval to sell financial cloud products to banks as argued in [Initiate with Add; sailing amid rocky waters](#), dated 13 Aug 2021. This could also help drive stronger third-party revenues, which is another catalyst. Key downside risks are 1) unexpected additional adverse regulations given that its customers operate in a highly regulated industry, and 2) Ping An Group reducing its technology spending, which would then hurt OneConnect's revenues.

Figure 7: China fintech companies comparison (share prices as of 25 Feb 2022)

Company Name	Bloomberg code	Rating	TP	Mkt. Cap.	Closing Price	P/S Ratio	P/E Ratio	Revenue Growth	Country
			(Listed Currency)	(Rmb m)	(Listed Currency)			(% YoY)	
Fintech software as a service company							FY21F	FY21F	FY21F
China:									
Bairong	6608 HK	NR	n.a.	3,184	7.8	2.0	20.7	40.8%	China
Hithink Royalfush Info	300033 CH	NR	n.a.	57,900	107.7	15.6	26.2	30.4%	China
Hundsun Tech	600570 CH	Add	120	76,396	52.27	14.2	49.3	28.5%	China
Linklogis	9959 HK	NR	n.a.	13,579	7.2	10.3	37.5	28.3%	China
OneConnect	OCFT US	Add	3.8	3,844	1.6	0.9	n.a.	24.9%	China
Shenzhen Kingdom Sci-Tech	600446 CH	NR	n.a.	15,048	16.0	2.2	38.5	23.7%	China
Sunline Tech	300348 CH	NR	n.a.	11,118	15.4	5.8	43.1	23.6%	China
Ysstech Info-tech	300377 CH	NR	n.a.	10,604	14.1	13.1	78.4	-3.6%	China
Yusys Tech	300674 CH	NR	n.a.	15,499	21.8	4.2	33.0	24.9%	China
Average							11.8	39.9	26.6%

SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS, BLOOMBERG

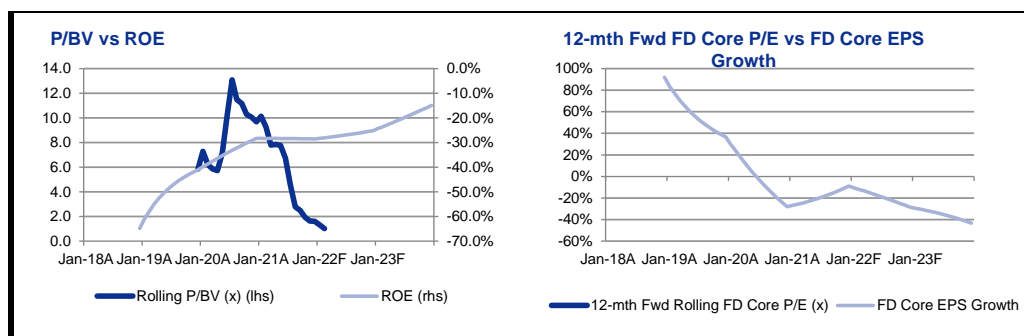
Note: Forecasts for Not rated companies are based on Bloomberg consensus estimates. OneConnect's FY21 numbers are actual and not estimates, as they are the only company to have reported FY21 results.

Figure 8: Key financial data of OneConnect

	FY17	FY18	FY19	FY20	FY21	FY22F	FY23F	FY24F	FY25F
Profit & Loss (Rmb m)									
Revenue	582	1,413	2,328	3,312	4,132	4,977	5,959	7,095	8,372
Cost of revenue	-483	-1,025	-1,561	-2,069	-2,696	-3,131	-3,605	-4,115	-4,652
Gross profit	99	389	767	1,243	1,437	1,846	2,354	2,980	3,720
Research and Development expenses	-537	-459	-956	-1,173	-1,353	-1,434	-1,521	-1,615	-1,864
Selling & marketing expenses	-208	-442	-636	-629	-588	-540	-500	-467	-528
General & administrative expenses	-270	-520	-757	-835	-842	-839	-851	-862	-987
Net impairment losses	0	-2	-45	-135	-72	-47	-36	-28	-31
Other income, gains or loss-net	26	-80	-74	58	14	14	14	14	14
Operating loss (EBIT)	-890	-1,114	-1,701	-1,470	-1,405	-1,000	-541	21	324
Finance costs - net	-84	-34	-47	-73	-48	-25	-40	-51	-58
Share of losses of associate & JVs	-3	-15	-15	-8	10	7	5	4	4
Loss before income tax	-977	-1,164	-1,762	-1,551	-1,443	-1,018	-575	-26	269
Tax	370	-26	75	137	112	79	45	2	-21
Loss for the year	-607	-1,190	-1,688	-1,414	-1,331	-938	-530	-24	248
Minority Interests	0	-5	27	61	49	31	16	1	-6
Loss attributable to owners	-607	-1,196	-1,661	-1,354	-1,282	-908	-515	-23	242
Mix of revenue									
Implementation	9%	21%	25%	26%	18%	13%	9%	7%	5%
Transaction-based and Support Services									
<i>Business origination services</i>	78%	39%	33%	18%	11%	8%	8%	8%	8%
<i>Risk management services</i>	0%	15%	14%	11%	13%	14%	14%	14%	15%
<i>Operation support services</i>	9%	22%	25%	32%	27%	26%	27%	26%	26%
<i>Cloud services platform</i>	0%	0%	0%	9%	25%	32%	35%	37%	39%
<i>Post-implem. support services</i>	1%	2%	2%	2%	1%	1%	1%	1%	1%
<i>Others</i>	4%	1%	2%	2%	5%	6%	6%	6%	6%
Sub-total	91%	79%	75%	74%	82%	87%	91%	93%	95%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%
Balance sheet									
Cash and cash equivalents	848	565	1,078	3,055	1,399	1,497	1,597	1,698	1,800
Other current assets	1,217	7,294	6,581	5,885	5,499	5,740	6,051	6,377	6,718
Total current assets	2,065	7,859	7,659	8,940	6,898	7,237	7,647	8,075	8,518
Total non current assets	951	1,524	2,269	1,946	2,442	2,629	2,924	3,318	3,774
Total assets	3,016	9,383	9,927	10,885	9,341	9,867	10,572	11,392	12,291
Short-term borrowings	1,502	3,386	3,219	2,283	815	1,233	1,345	1,596	1,568
Other current liabilities	1,359	1,736	1,721	2,883	4,347	4,839	5,395	5,984	6,663
Total current liabilities	2,861	5,122	4,940	5,167	5,162	6,072	6,741	7,579	8,230
Total non-current liabilities	189	429	467	433	343	340	336	339	342
Total liabilities	3,050	5,552	5,407	5,600	5,506	6,411	7,077	7,918	8,572
Equity pre-minorities	-35	3,720	4,370	5,195	3,794	3,412	3,449	3,426	3,669
Minorities	0	111	150	90	41	43	45	48	50
Total equity	-35	3,831	4,521	5,285	3,835	3,455	3,495	3,474	3,719
Key ratios and data									
Gross margin	17.1%	27.5%	32.9%	37.5%	34.8%	37.1%	39.5%	42.0%	44.4%
EBIT margin	-153.0%	-78.8%	-73.1%	-44.4%	-34.0%	-20.1%	-9.1%	0.3%	3.9%
EBITDA margin	-103.6%	-53.8%	-53.3%	-31.7%	-19.1%	-10.2%	-1.0%	7.1%	10.1%
Net profit margin	-104.3%	-84.6%	-71.3%	-40.9%	-31.0%	-18.2%	-8.6%	-0.3%	2.9%
Revenue per ADS (Rmb)	1.94	4.59	7.43	9.33	11.19	13.61	16.30	19.40	22.89
Earnings per ADS (Rmb)	-2.02	-3.88	-5.30	-3.81	-3.47	-2.48	-1.41	-0.06	0.66
Book value per ADS (Rmb)	-0.12	12.08	13.96	14.64	10.27	9.33	9.43	9.37	10.03
EBITDA (Rmb m)	-603	-760	-1,241	-1,049	-791	-506	-60	502	846
ROE		-65%	-41%	-28%	-29%	-25%	-15%	-1%	7%
ROA		-19%	-17%	-13%	-13%	-9%	-5%	0%	2%
Assets/ Equity ratio	-86.4	2.4	2.2	2.1	2.4	2.9	3.0	3.3	3.3
Dividend per ADS (Rmb)	0	0	0	0	0	0	0	0	0
Total revenue growth		142.9%	64.7%	42.3%	24.8%	20.4%	19.7%	19.1%	18.0%
Total net profit growth		97%	39%	-18%	-5%	-29%	-43%	-96%	-1157%
R&D/ total revenue (%)	92%	32%	41%	35%	33%	29%	26%	23%	22%
Selling & marketing exp. / total revenue (%)	36%	31%	27%	19%	14%	11%	8%	7%	6%
General admin. expenses / total revenue (%)	46%	37%	33%	25%	20%	17%	14%	12%	12%
Net impairment losses/ total revenue (%)		0.2%	1.9%	4.1%	1.7%	1.0%	0.6%	0.4%	0.4%
Financing costs/ average borrowings (%)		6.7%	5.3%	5.5%	4.9%	4.9%	4.9%	4.9%	4.9%

SOURCES: CGS-CIMB RESEARCH ESTIMATES, COMPANY REPORTS

BY THE NUMBERS



Profit & Loss

(Rmbm)	Dec-20A	Dec-21A	Dec-22F	Dec-23F	Dec-24F
Total Net Revenues	3,312	4,132	4,977	5,959	7,095
Gross Profit	1,243	1,437	1,846	2,354	2,980
Operating EBITDA	(1,049)	(791)	(506)	(60)	502
Depreciation And Amortisation	(421)	(614)	(494)	(481)	(482)
Operating EBIT	(1,470)	(1,405)	(1,000)	(541)	21
Financial Income/(Expense)	(73)	(48)	(25)	(40)	(51)
Pretax Income/(Loss) from Assoc.	(8)	10	7	5	4
Non-Operating Income/(Expense)	0	0	0	0	0
Profit Before Tax (pre-EI)	(1,551)	(1,443)	(1,018)	(575)	(26)
Exceptional Items					
Pre-tax Profit	(1,551)	(1,443)	(1,018)	(575)	(26)
Taxation	137	112	79	45	2
Exceptional Income - post-tax					
Profit After Tax	(1,414)	(1,331)	(938)	(530)	(24)
Minority Interests	61	49	31	16	1
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	(1,354)	(1,282)	(908)	(515)	(23)
Recurring Net Profit	(1,354)	(1,282)	(908)	(515)	(23)
Fully Diluted Recurring Net Profit	(1,354)	(1,282)	(908)	(515)	(23)

Cash Flow

(Rmbm)	Dec-20A	Dec-21A	Dec-22F	Dec-23F	Dec-24F
EBITDA	(1,049)	(791)	(506)	(60)	502
Cash Flow from Inv. & Assoc.	5	(10)	(7)	(5)	(4)
Change In Working Capital	130	78	(595)	(638)	(672)
(Incr)/Decr in Total Provisions	197	103	47	36	28
Other Non-Cash (Income)/Expense	97	268	104	119	132
Other Operating Cashflow					
Net Interest (Paid)/Received	(73)	(48)	(25)	(40)	(51)
Tax Paid	(10)	(6)	(15)	(9)	(1)
Cashflow From Operations	(704)	(404)	(996)	(597)	(66)
Capex	(56)	(137)	(171)	(205)	(238)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/investments	0	0	0	0	0
Other Investing Cashflow	1,371	525	973	937	318
Cash Flow From Investing	1,316	388	802	731	80
Debt Raised/(repaid)	2,257	1,391	2,992	2,428	2,335
Proceeds From Issue Of Shares	2,722	0	0	0	0
Shares Repurchased					
Dividends Paid					
Preferred Dividends					
Other Financing Cashflow	(3,446)	(3,003)	(2,700)	(2,463)	(2,248)
Cash Flow From Financing	1,534	(1,612)	292	(34)	87
Total Cash Generated	2,145	(1,628)	98	100	101
Free Cashflow To Equity	2,869	1,376	2,798	2,562	2,349
Free Cashflow To Firm	762	61	(143)	198	87

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

BY THE NUMBERS... cont'd

Balance Sheet

(Rmbm)	Dec-20A	Dec-21A	Dec-22F	Dec-23F	Dec-24F
Total Cash And Equivalents	5,336	2,460	2,558	2,742	2,935
Total Debtors	1,540	1,868	1,981	2,073	2,167
Inventories					
Total Other Current Assets	2,064	2,570	2,698	2,832	2,973
Total Current Assets	8,940	6,898	7,237	7,647	8,075
Fixed Assets	229	244	288	344	403
Total Investments	198	826	898	975	1,060
Intangible Assets	917	687	629	653	757
Total Other Non-Current Assets	607	685	814	952	1,098
Total Non-current Assets	1,951	2,442	2,629	2,924	3,318
Short-term Debt	2,283	815	1,233	1,345	1,596
Current Portion of Long-Term Debt					
Total Creditors	2,173	2,652	2,836	3,037	3,210
Other Current Liabilities	710	1,695	2,002	2,358	2,774
Total Current Liabilities	5,167	5,162	6,072	6,741	7,579
Total Long-term Debt					
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities	413	333	329	324	326
Total Non-current Liabilities	413	333	329	324	326
Total Provisions	20	10	11	12	13
Total Liabilities	5,600	5,506	6,411	7,077	7,918
Shareholders' Equity	5,195	3,794	3,412	3,449	3,426
Minority Interests	90	41	43	45	48
Total Equity	5,285	3,835	3,455	3,495	3,474

Key Ratios

	Dec-20A	Dec-21A	Dec-22F	Dec-23F	Dec-24F
Revenue Growth	42.3%	24.8%	20.4%	19.7%	19.1%
Operating EBITDA Growth	(15.5%)	(24.6%)	(36.0%)	(88.1%)	N/A
Operating EBITDA Margin	(31.7%)	(19.1%)	(10.2%)	(1.0%)	7.1%
Net Cash Per Share (Rmb)	7.83	4.22	3.40	3.58	3.43
BVPS (Rmb)	13.32	9.73	8.75	8.84	8.79
Gross Interest Cover	(9.78)	(18.33)	(19.73)	(8.48)	0.29
Effective Tax Rate	0%	0%	0%	0%	0%
Net Dividend Payout Ratio	NA	NA	NA	NA	NA
Accounts Receivables Days	85.57	76.40	67.30	59.46	52.84
Inventory Days	-	-	-	-	-
Accounts Payables Days	232.1	249.5	255.4	232.9	212.7
ROIC (%)	(34.7%)	(42.6%)	(43.9%)	(25.8%)	1.1%
ROCE (%)	(18.1%)	(22.5%)	(20.8%)	(10.8%)	0.9%
Return On Average Assets	(13.1%)	(12.8%)	(9.6%)	(4.9%)	0.1%

Key Drivers

	Dec-20A	Dec-21A	Dec-22F	Dec-23F	Dec-24F
R&D/ total revenue (%)	35.4%	32.7%	28.8%	25.5%	22.8%
Selling & marketing exp. / total revenue (%)	19.0%	14.2%	10.8%	8.4%	6.6%
General admin. expenses / total revenue (%)	25.2%	20.4%	16.8%	14.3%	12.2%
Net impairment losses/ total revenue (%)	406.1%	174.8%	95.1%	60.5%	39.5%
Minorities / profit pre minorities (%)	-4.3%	-3.7%	-3.3%	-3.0%	-2.7%
Effective tax rate (%)	8.8%	7.8%	7.8%	7.8%	7.8%
Financing costs/ average borrowings (%)	5.5%	4.9%	4.9%	4.9%	4.9%
Total revenue growth (%)	42.3%	24.8%	20.4%	19.7%	19.1%
Gross margin (%)	37.5%	34.8%	37.1%	39.5%	42.0%

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

DISCLAIMER

The content of this report (including the views and opinions expressed therein, and the information comprised therein) has been prepared by and belongs to CGS-CIMB. Reports relating to a specific geographical area are produced and distributed by the corresponding CGS-CIMB entity as listed in the table below.

This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation.

By accepting this report, the recipient hereof represents and warrants that he is entitled to receive such report in accordance with the restrictions set forth below and agrees to be bound by the limitations contained herein (including the "Restrictions on Distributions" set out below). Any failure to comply with these limitations may constitute a violation of law. This publication is being supplied to you strictly on the basis that it will remain confidential. No part of this report may be (i) copied, photocopied, duplicated, stored or reproduced in any form by any means; or (ii) redistributed or passed on, directly or indirectly, to any other person in whole or in part, for any purpose without the prior written consent of CGS-CIMB.

The information contained in this research report is prepared from data believed to be correct and reliable at the time of issue of this report. CGS-CIMB may or may not issue regular reports on the subject matter of this report at any frequency and may cease to do so or change the periodicity of reports at any time. CGS-CIMB has no obligation to update this report in the event of a material change to the information contained in this report. CGS-CIMB does not accept any obligation to (i) check or ensure that the contents of this report remain current, reliable or relevant, (ii) ensure that the content of this report constitutes all the information a prospective investor may require, (iii) ensure the adequacy, accuracy, completeness, reliability or fairness of any views, opinions and information, and accordingly, CGS-CIMB, its affiliates and related persons including China Galaxy International Financial Holdings Limited ("CGIFHL") and CIMB Group Sdn. Bhd. ("CIMBG") and their respective related corporations (and their respective directors, associates, connected persons and/or employees) shall not be liable in any manner whatsoever for any consequences (including but not limited to any direct, indirect or consequential losses, loss of profits and damages) of any reliance thereon or usage thereof. In particular, CGS-CIMB disclaims all responsibility and liability for the views and opinions set out in this report.

Unless otherwise specified, this report is based upon sources which CGS-CIMB considers to be reasonable. Such sources will, unless otherwise specified, for market data, be market data and prices available from the main stock exchange or market where the relevant security is listed, or, where appropriate, any other market. Information on the accounts and business of company(ies) will generally be based on published statements of the company(ies), information disseminated by regulatory information services, other publicly available information and information resulting from our research.

Whilst every effort is made to ensure that statements of facts made in this report are accurate, all estimates, projections, forecasts, expressions of opinion and other subjective judgments contained in this report are based on assumptions considered to be reasonable as of the date of the document in which they are contained and must not be construed as a representation that the matters referred to therein will occur. Past performance is not a reliable indicator of future performance. The value of investments may go down as well as up and those investing may, depending on the investments in question, lose more than the initial investment. No report shall constitute an offer or an invitation by or on behalf of CGS-CIMB or any of its affiliates (including CGIFHL, CIMBG and their respective related corporations) to any person to buy or sell any investments.

CGS-CIMB, its affiliates and related corporations (including CGIFHL, CIMBG and their respective related corporations) and/or their respective directors, associates, connected parties and/or employees may own or have positions in securities of the company(ies) covered in this research report or any securities related thereto and may from time to time add to or dispose of, or may be materially interested in, any such securities. Further, CGS-CIMB, its affiliates and their respective related corporations (including CGIFHL, CIMBG and their respective related corporations) do and seek to do business with the company(ies) covered in this research report and may from time to time act as market maker or have assumed an underwriting commitment in securities of such company(ies), may sell them to or buy them from customers on a principal basis and may also perform or seek to perform significant investment banking, advisory, underwriting or placement services for or relating to such company(ies) as well as solicit such investment, advisory or other services from any entity mentioned in this report.

CGS-CIMB or its affiliates (including CGIFHL, CIMBG and their respective related corporations) may enter into an agreement with the company(ies) covered in this report relating to the production of research reports. CGS-CIMB may disclose the contents of this report to the company(ies) covered by it and may have amended the contents of this report following such disclosure.

The analyst responsible for the production of this report hereby certifies that the views expressed herein accurately and exclusively reflect his or her personal views and opinions about any and all of the issuers or securities analysed in this report and were prepared independently and autonomously. No part of the compensation of the analyst(s) was, is, or will be directly or indirectly related to the inclusion of specific recommendations(s) or view(s) in this report. The analyst(s) who prepared this research report is prohibited from receiving any compensation, incentive or bonus based on specific investment banking transactions or for providing a specific recommendation for, or view of, a particular company. Information barriers and other arrangements may be established where necessary to prevent conflicts of interests arising. However, the analyst(s) may receive compensation that is based on his/their coverage of company(ies) in the performance of his/their duties or the performance of his/their recommendations and the research personnel involved in the preparation of this report may also participate in the solicitation of the businesses as described above. In reviewing this research report, an investor should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest. Additional information is, subject to the duties of confidentiality, available on request.

Reports relating to a specific geographical area are produced by the corresponding CGS-CIMB entity as listed in the table below. The term "CGS-CIMB" shall denote, where appropriate, the relevant entity distributing or disseminating the report in the particular jurisdiction referenced below, or, in every other case except as otherwise stated herein, CGS-CIMB Securities International Pte. Ltd. and its affiliates, subsidiaries and related corporations.

Country	CGS-CIMB Entity	Regulated by
Hong Kong	CGS-CIMB Securities (Hong Kong) Limited	Securities and Futures Commission Hong Kong
India	CGS-CIMB Securities (India) Private Limited	Securities and Exchange Board of India (SEBI)
Indonesia	PT CGS-CIMB Sekuritas Indonesia	Financial Services Authority of Indonesia
Malaysia	CGS-CIMB Securities Sdn. Bhd.	Securities Commission Malaysia
Singapore	CGS-CIMB Securities (Singapore) Pte. Ltd.	Monetary Authority of Singapore
South Korea	CGS-CIMB Securities (Hong Kong) Limited, Korea Branch	Financial Services Commission and Financial Supervisory Service
Thailand	CGS-CIMB Securities (Thailand) Co. Ltd.	Securities and Exchange Commission Thailand

Other Significant Financial Interests:

(i) As of January 31, 2022 CGS-CIMB has a proprietary position in the securities (which may include but not be limited to shares, warrants, call warrants and/or any other derivatives) in the following company or companies covered or recommended in this report:

(a) -

(ii) Analyst Disclosure: As of February 28, 2022, the analyst(s) who prepared this report, and the associate(s), has / have an interest in the securities (which may include but not be limited to shares, warrants, call warrants and/or any other derivatives) in the following company or companies covered or recommended in this report:

(a) -

This report does not purport to contain all the information that a prospective investor may require. Neither CGS-CIMB nor any of its affiliates (including CGIFHL, CIMBG and their related corporations) make any guarantee, representation or warranty, express or implied, as to the adequacy, accuracy, completeness, reliability or fairness of any such information and opinion contained in this report. Neither CGS-CIMB nor any of its affiliates nor their related persons (including CGIFHL, CIMBG and their related corporations) shall be liable in any manner whatsoever for any consequences (including but not limited to any direct, indirect or consequential losses, loss of profits and damages) of any reliance thereon or usage thereof.

This report is general in nature and has been prepared for information purposes only. It is intended for circulation amongst CGS-CIMB's clients generally and does not have regard to the specific investment objectives, financial situation and the particular needs of any specific person who may receive this report. The information and opinions in this report are not and should not be construed or considered as an offer, recommendation or solicitation to buy or sell the subject securities, related investments or other financial instruments or any derivative instrument, or any rights pertaining thereto.

Investors are advised to make their own independent evaluation of the information contained in this research report, consider their own individual investment objectives, financial situation and particular needs and consult their own professional and financial advisers as to the legal, business, financial, tax and other aspects before participating in any transaction in respect of the securities of company(ies) covered in this research report.

The securities of such company(ies) may not be eligible for sale in all jurisdictions or to all categories of investors.

Restrictions on Distributions

Australia: Despite anything in this report to the contrary, this research is provided in Australia by CGS-CIMB Securities (Singapore) Pte. Ltd. and CGS-CIMB Securities (Hong Kong) Limited. This research is only available in Australia to persons who are "wholesale clients" (within the meaning of the Corporations Act 2001 (Cth) and is supplied solely for the use of such wholesale clients and shall not be distributed or passed on to any other person. You represent and warrant that if you are in Australia, you are a "wholesale client". This research is of a general nature only and has been prepared without taking into account the objectives, financial situation or needs of the individual recipient. CGS-CIMB Securities (Singapore) Pte. Ltd. and CGS-CIMB Securities (Hong Kong) Limited do not hold, and are not required to hold an Australian financial services license. CGS-CIMB Securities (Singapore) Pte. Ltd. and CGS-CIMB Securities (Hong Kong) Limited rely on "passporting" exemptions for entities appropriately licensed by the Monetary Authority of Singapore (under ASIC Class Order 03/1102) and the Securities and Futures Commission in Hong Kong (under ASIC Class Order 03/1103).

Canada: This research report has not been prepared in accordance with the disclosure requirements of Dealer Member Rule 3400 – Research Restrictions and Disclosure Requirements of the Investment Industry Regulatory Organization of Canada. For any research report distributed by CIBC, further disclosures related to CIBC conflicts of interest can be found at <https://researchcentral.cibcwm.com>.

China: For the purpose of this report, the People's Republic of China ("PRC") does not include the Hong Kong Special Administrative Region, the Macau Special Administrative Region or Taiwan. The distributor of this report has not been approved or licensed by the China Securities Regulatory Commission or any other relevant regulatory authority or governmental agency in the PRC. This report contains only marketing information. The distribution of this report is not an offer to buy or sell to any person within or outside PRC or a solicitation to any person within or outside of PRC to buy or sell any instruments described herein. This report is being issued outside the PRC to a limited number of institutional investors and may not be provided to any person other than the original recipient and may not be reproduced or used for any other purpose.

France: Only qualified investors within the meaning of French law shall have access to this report. This report shall not be considered as an offer to subscribe to, or used in connection with, any offer for subscription or sale or marketing or direct or indirect distribution of financial instruments and it is not intended as a solicitation for the purchase of any financial instrument.

Germany: This report is only directed at persons who are professional investors as defined in sec 31a(2) of the German Securities Trading Act (WpHG). This publication constitutes research of a non-binding nature on the market situation and the investment instruments cited here at the time of the publication of the information.

The current prices/yields in this issue are based upon closing prices from Bloomberg as of the day preceding publication. Please note that neither the German Federal Financial Supervisory Agency (BaFin), nor any other supervisory authority exercises any control over the content of this report.

Hong Kong: This report is issued and distributed in Hong Kong by CGS-CIMB Securities (Hong Kong) Limited ("CHK") which is licensed in Hong Kong by the Securities and Futures Commission for Type 1 (dealing in securities) and Type 4 (advising on securities) activities. Any investors wishing to purchase or otherwise deal in the securities covered in this report should contact the Head of Sales at CGS-CIMB Securities (Hong Kong) Limited. The views and opinions in this research report are our own as of the date hereof and are subject to change. If the Financial Services and Markets

Act of the United Kingdom or the rules of the Financial Conduct Authority apply to a recipient, our obligations owed to such recipient therein are unaffected. CHK has no obligation to update its opinion or the information in this research report.

This publication is strictly confidential and is for private circulation only to clients of CHK.

CHK does not make a market on other securities mentioned in the report.

None of the analyst(s) or the associates serve as an officer of the listed corporation mentioned in this report.

CIMB does not have an officer serving in any of the listed corporation mentioned in this report

CIMB does not receive any compensation or other benefits from any of the listed corporation mentioned, relating to the production of research reports.

India: This report is issued and distributed in India by CGS-CIMB Securities (India) Private Limited (“CGS-CIMB India”). CGS-CIMB India is a subsidiary of CGS-CIMB Securities International Pte. Ltd. which is in turn is a 50:50 joint venture company of CGIFHL and CIMBG. The details of the members of the group of companies of CGS-CIMB can be found at www.cgs-cimb.com, CGIFHL at www.chinastock.com.hk/en/ACG/ContactUs/index.aspx and CIMBG at www.cimb.com/en/who-we-are.html. CGS-CIMB India is registered with the National Stock Exchange of India Limited and BSE Limited as a trading and clearing member (Merchant Banking Number: INM000012037) under the Securities and Exchange Board of India (Stock Brokers and Sub-Brokers) Regulations, 1992. In accordance with the provisions of Regulation 4(g) of the Securities and Exchange Board of India (Investment Advisers) Regulations, 2013, CGS-CIMB India is not required to seek registration with the Securities and Exchange Board of India (“SEBI”) as an Investment Adviser. CGS-CIMB India is registered with SEBI (SEBI Registration Number: INZ000209135) as a Research Analyst (INH000000669) pursuant to the SEBI (Research Analysts) Regulations, 2014 (“Regulations”).

This report does not take into account the particular investment objectives, financial situations, or needs of the recipients. It is not intended for and does not deal with prohibitions on investment due to law/jurisdiction issues etc. which may exist for certain persons/entities. Recipients should rely on their own investigations and take their own professional advice before investment.

The report is not a “prospectus” as defined under Indian Law, including the Companies Act, 2013, and is not, and shall not be, approved by, or filed or registered with, any Indian regulator, including any Registrar of Companies in India, SEBI, any Indian stock exchange, or the Reserve Bank of India. No offer, or invitation to offer, or solicitation of subscription with respect to any such securities listed or proposed to be listed in India is being made, or intended to be made, to the public, or to any member or section of the public in India, through or pursuant to this report.

The research analysts, strategists or economists principally responsible for the preparation of this research report are segregated from the other activities of CGS-CIMB India and they have received compensation based upon various factors, including quality, accuracy and value of research, firm profitability or revenues, client feedback and competitive factors. Research analysts', strategists' or economists' compensation is not linked to investment banking or capital markets transactions performed or proposed to be performed by CGS-CIMB India or its affiliates.

CGS-CIMB India does not have actual / beneficial ownership of 1% or more securities of the subject company in this research report, at the end of the month immediately preceding the date of publication of this research report. However, since affiliates of CGS-CIMB India are engaged in the financial services business, they might have in their normal course of business financial interests or actual / beneficial ownership of one per cent or more in various companies including the subject company in this research report.

CGS-CIMB India or its associates, may: (a) from time to time, have long or short position in, and buy or sell the securities of the subject company in this research report; or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the subject company in this research report or act as an advisor or lender/borrower to such company or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.

CGS-CIMB India, its associates and the analyst engaged in preparation of this research report have not received any compensation for investment banking, merchant banking or brokerage services from the subject company mentioned in the research report in the past 12 months.

CGS-CIMB India, its associates and the analyst engaged in preparation of this research report have not managed or co-managed public offering of securities for the subject company mentioned in the research report in the past 12 months. The analyst from CGS-CIMB India engaged in preparation of this research report or his/her relative (a) do not have any financial interests in the subject company mentioned in this research report; (b) do not own 1% or more of the equity securities of the subject company mentioned in the research report as of the last day of the month preceding the publication of the research report; (c) do not have any material conflict of interest at the time of publication of the research report.

Indonesia: This report is issued and distributed by PT CGS-CIMB Sekuritas Indonesia (“CGS-CIMB Indonesia”). The views and opinions in this research report are our own as of the date hereof and are subject to change. CGS-CIMB Indonesia has no obligation to update its opinion or the information in this research report. This report is for private circulation only to clients of CGS-CIMB Indonesia. Neither this report nor any copy hereof may be distributed in Indonesia or to any Indonesian citizens wherever they are domiciled or to Indonesian residents except in compliance with applicable Indonesian capital market laws and regulations.

This research report is not an offer of securities in Indonesia. The securities referred to in this research report have not been registered with the Financial Services Authority (Otoritas Jasa Keuangan) pursuant to relevant capital market laws and regulations, and may not be offered or sold within the territory of the Republic of Indonesia or to Indonesian citizens through a public offering or in circumstances which constitute an offer within the meaning of the Indonesian capital market law and regulations.

Ireland: CGS-CIMB is not an investment firm authorised in the Republic of Ireland and no part of this document should be construed as CGS-CIMB acting as, or otherwise claiming or representing to be, an investment firm authorised in the Republic of Ireland.

Malaysia: This report is distributed in Malaysia by CGS-CIMB Securities Sdn. Bhd. (“CGS-CIMB Malaysia”) solely for the benefit of and for the exclusive use of our clients. Recipients of this report are to contact CGS-CIMB Malaysia, at Level 29, Menara Bumiputra-Commerce, No. 11, Jalan Raja Laut, 50350 Kuala Lumpur, Malaysia, in respect of any matters arising from or in connection with this report. CGS-CIMB Malaysia has no obligation to update, revise or reaffirm its opinion or the information in this research reports after the date of this report.

New Zealand: In New Zealand, this report is for distribution only to persons who are wholesale clients pursuant to section 5C of the Financial Advisers Act 2008.

Singapore: This report is issued and distributed by CGS-CIMB Securities (Singapore) Pte Ltd (“CGS-CIMB Singapore”). CGS-CIMB Singapore is a capital markets services licensee under the Securities and Futures Act (Chapter 289). Accordingly, it is exempted from the requirement to hold a

financial adviser's licence under the Financial Advisers Act, Cap 110 ("FAA") for advising on investment products, by issuing or promulgating research analyses or research reports, whether in electronic, print or other form. CGS-CIMB Singapore is subject to the applicable rules under the FAA unless it is able to avail itself to any prescribed exemptions.

Recipients of this report are to contact CGS-CIMB Singapore, 10 Marina Boulevard, Marina Bay Financial Centre Tower 2, #09-01, Singapore 018983 in respect of any matters arising from, or in connection with this report. CGS-CIMB Singapore has no obligation to update its opinion or the information in this research report. This publication is strictly confidential and is for private circulation only. If you have not been sent this report by CGS-CIMB Singapore directly, you may not rely, use or disclose to anyone else this report or its contents.

If the recipient of this research report is not an accredited investor, expert investor or institutional investor, CGS-CIMB Singapore accepts legal responsibility for the contents of the report without any disclaimer limiting or otherwise curtailing such legal responsibility. If the recipient is an accredited investor, expert investor or institutional investor, the recipient is deemed to acknowledge that CGS-CIMB Singapore is exempt from certain requirements under the FAA and its attendant regulations, and as such, is exempt from complying with the following:

- (a) Section 25 of the FAA (obligation to disclose product information);
- (b) Section 27 (duty not to make recommendation with respect to any investment product without having a reasonable basis where you may be reasonably expected to rely on the recommendation) of the FAA;
- (c) MAS Notice on Information to Clients and Product Information Disclosure [Notice No. FAA-N03];
- (d) MAS Notice on Recommendation on Investment Products [Notice No. FAA-N16];
- (e) Section 36 (obligation on disclosure of interest in specified products), and
- (f) any other laws, regulations, notices, directive, guidelines, circulars and practice notes which are relates to the above, to the extent permitted by applicable laws, as may be amended from time to time, and any other laws, regulations, notices, directive, guidelines, circulars, and practice notes as we may notify you from time to time. In addition, the recipient who is an accredited investor, expert investor or institutional investor acknowledges that as CGS-CIMB Singapore is exempt from Section 27 of the FAA, the recipient will also not be able to file a civil claim against CGS-CIMB Singapore for any loss or damage arising from the recipient's reliance on any recommendation made by CGS-CIMB Singapore which would otherwise be a right that is available to the recipient under Section 27 of the FAA. .

CGS-CIMB Singapore, its affiliates and related corporations, their directors, associates, connected parties and/or employees may own or have positions in specified products of the company(ies) covered in this research report or any specified products related thereto and may from time to time add to or dispose of, or may be materially interested in, any such specified products. Further, CGS-CIMB Singapore, its affiliates and its related corporations do and seek to do business with the company(ies) covered in this research report and may from time to time act as market maker or have assumed an underwriting commitment in specified products of such company(ies), may sell them to or buy them from customers on a principal basis and may also perform or seek to perform significant investment banking, advisory, underwriting or placement services for or relating to such company(ies) as well as solicit such investment, advisory or other services from any entity mentioned in this report.

As of February 25, 2022, CGS-CIMB Singapore does not have a proprietary position in the recommended specified products in this report.

CGS-CIMB Singapore does not make a market on the securities mentioned in the report.

South Korea: This report is issued and distributed in South Korea by CGS-CIMB Securities (Hong Kong) Limited, Korea Branch ("CGS-CIMB Korea") which is licensed as a cash equity broker, and regulated by the Financial Services Commission and Financial Supervisory Service of Korea. In South Korea, this report is for distribution only to professional investors under Article 9(5) of the Financial Investment Services and Capital Market Act of Korea ("FSCMA").

Spain: This document is a research report and it is addressed to institutional investors only. The research report is of a general nature and not personalised and does not constitute investment advice so, as the case may be, the recipient must seek proper advice before adopting any investment decision. This document does not constitute a public offering of securities.

CGS-CIMB is not registered with the Spanish Comision Nacional del Mercado de Valores to provide investment services.

Sweden: This report contains only marketing information and has not been approved by the Swedish Financial Supervisory Authority. The distribution of this report is not an offer to sell to any person in Sweden or a solicitation to any person in Sweden to buy any instruments described herein and may not be forwarded to the public in Sweden.

Switzerland: This report has not been prepared in accordance with the recognized self-regulatory minimal standards for research reports of banks issued by the Swiss Bankers' Association (Directives on the Independence of Financial Research).

Thailand: This report is issued and distributed by CGS-CIMB Securities (Thailand) Co. Ltd. ("CGS-CIMB Thailand") based upon sources believed to be reliable (but their accuracy, completeness or correctness is not guaranteed). The statements or expressions of opinion herein were arrived at after due and careful consideration for use as information for investment. Such opinions are subject to change without notice and CGS-CIMB Thailand has no obligation to update its opinion or the information in this research report.

CGS-CIMB Thailand may act or acts as Market Maker, and issuer and offeror of Derivative Warrants and Structured Note which may have the following securities as its underlying securities. Investors should carefully read and study the details of the derivative warrants in the prospectus before making investment decisions.

AAV, ACE, ADVANC, AEONTS, AMATA, AOT, AP, BAM, BANPU, BBL, BCH, BCP, BCPG, BDMS, BEC, BEM, BGRIM, BH, BJC, BTS, CBG, CENTEL, CHG, CK, CKP, COM7, CPALL, CPF, CPN, CRC, DELTA, DOHOME, DTAC, EA, EGCO, ESSO, GLOBAL, GPSC, GULF, GUNKUL, HANA, HMPRO, ICHI, INTUCH, IRPC, IVL, JAS, JMART, JMT, KBANK, KCE, KKP, KTB, KTC, LH, MAJOR, MEGA, MINT, MTC, NRF, OR, ORI, OSP, PLANB, PRM, PSL, PTG, PTL, PTT, PTTEP, PTTGC, QH, RATCH, RBF, RS, SAWAD, SCB, SCC, SCGP, SINGER, SPALI, SPRC, STA, STEC, STGT, SUPER, SYNEX, TASCO, TCAP, THANI, TISCO, TKN, TOP, TQM, TRUE, TTB, TU, TVO, VGI, WHA

Corporate Governance Report:

The disclosure of the survey result of the Thai Institute of Directors Association ("IOD") regarding corporate governance is made pursuant to the policy of the Office of the Securities and Exchange Commission. The survey of the IOD is based on the information of a company listed on the Stock Exchange of Thailand and the Market for Alternative Investment disclosed to the public and able to be accessed by a general public investor. The result, therefore, is from the perspective of a third party. It is not an evaluation of operation and is not based on inside information.

The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey result may be changed after that date. CGS-CIMB Thailand does not confirm nor certify the accuracy of such survey result.

Score Range:	90 - 100	80 – 89	70 - 79	Below 70	No Survey Result
Description:	Excellent	Very Good	Good	N/A	N/A

United Arab Emirates: The distributor of this report has not been approved or licensed by the UAE Central Bank or any other relevant licensing authorities or governmental agencies in the United Arab Emirates. This report is strictly private and confidential and has not been reviewed by, deposited or registered with UAE Central Bank or any other licensing authority or governmental agencies in the United Arab Emirates. This report is being issued outside the United Arab Emirates to a limited number of institutional investors and must not be provided to any person other than the original recipient and may not be reproduced or used for any other purpose. Further, the information contained in this report is not intended to lead to the sale of investments under any subscription agreement or the conclusion of any other contract of whatsoever nature within the territory of the United Arab Emirates.

United Kingdom and European Economic Area (EEA): In the United Kingdom and European Economic Area, this material is also being distributed by CGS-CIMB Securities (UK) Limited (“CGS-CIMB UK”). CGS-CIMB UK is authorized and regulated by the Financial Conduct Authority and its registered office is at 53 New Broad Street, London EC2M 1JJ. The material distributed by CGS-CIMB UK has been prepared in accordance with CGS-CIMB’s policies for managing conflicts of interest arising as a result of publication and distribution of this material. This material is for distribution only to, and is solely directed at, selected persons on the basis that those persons: (a) are eligible counterparties and professional clients of CGS-CIMB UK; (b) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the “Order”), (c) fall within Article 49(2)(a) to (d) (“high net worth companies, unincorporated associations etc”) of the Order; (d) are outside the United Kingdom subject to relevant regulation in each jurisdiction, material(all such persons together being referred to as “relevant persons”). This material 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 material relates is available only to relevant persons and will be engaged in only with relevant persons.

This material is categorised as non-independent for the purposes of CGS-CIMB UK and therefore does not provide an impartial or objective assessment of the subject matter and does not constitute independent research. Consequently, this material has not been prepared in accordance with legal requirements designed to promote the independence of research and will not be subject to any prohibition on dealing ahead of the dissemination of research. Therefore, this material is considered a marketing communication.

United States: This research report is distributed in the United States of America by CGS-CIMB Securities (USA) Inc, a U.S. registered broker-dealer and an affiliate of CGS-CIMB Securities Sdn. Bhd., CGS-CIMB Securities (Singapore) Pte Ltd, PT CGS-CIMB Sekuritas Indonesia, CGS-CIMB Securities (Thailand) Co. Ltd, CGS-CIMB Securities (Hong Kong) Limited and CGS-CIMB Securities (India) Private Limited, and is distributed solely to persons who qualify as “U.S. Institutional Investors” as defined in Rule 15a-6 under the Securities and Exchange Act of 1934. This communication is only for Institutional Investors whose ordinary business activities involve investing in shares, bonds, and associated securities and/or derivative securities and who have professional experience in such investments. Any person who is not a U.S. Institutional Investor or Major Institutional Investor must not rely on this communication. The delivery of this research report to any person in the United States of America is not a recommendation to effect any transactions in the securities discussed herein, or an endorsement of any opinion expressed herein. CGS-CIMB Securities (USA) Inc, is a FINRA/SIPC member and takes responsibility for the content of this report. For further information or to place an order in any of the above-mentioned securities please contact a registered representative of CGS-CIMB Securities (USA) Inc.

CGS-CIMB Securities (USA) Inc. does not make a market on other securities mentioned in the report.

CGS-CIMB Securities (USA) Inc. has not managed or co-managed a public offering of any of the securities mentioned in the past 12 months.

CGS-CIMB Securities (USA) Inc. has not received compensation for investment banking services from any of the company mentioned in the past 12 months.

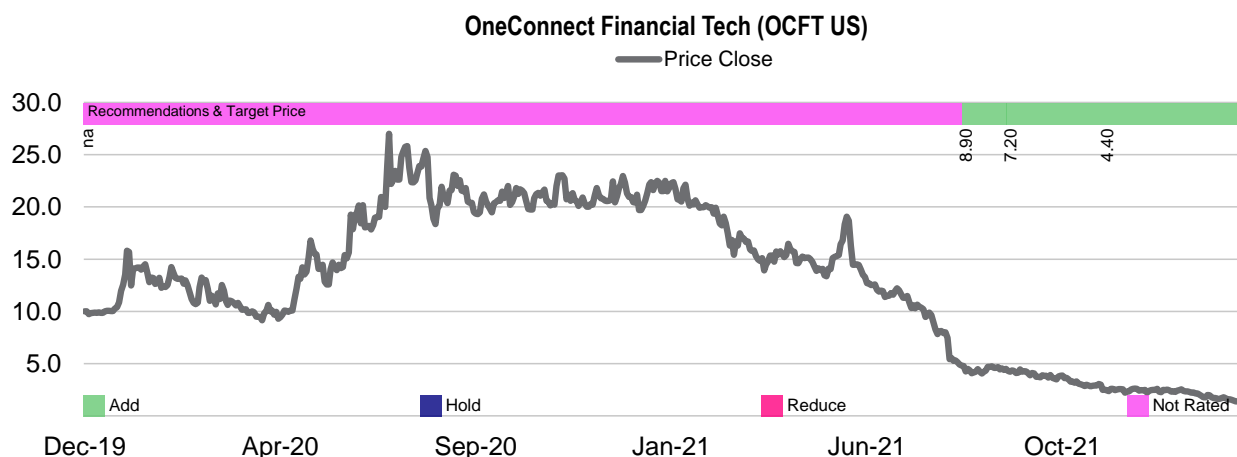
CGS-CIMB Securities (USA) Inc. neither expects to receive nor intends to seek compensation for investment banking services from any of the company mentioned within the next 3 months.

United States Third-Party Disclaimer: If this report is distributed in the United States of America by Raymond James & Associates, Inc (“RJA”), this report is third-party research prepared for and distributed in the United States of America by RJA pursuant to an arrangement between RJA and CGS-CIMB Securities International Pte. Ltd. (“CGS-CIMB”). CGS-CIMB is not an affiliate of RJA. This report is distributed solely to persons who qualify as “U.S. Institutional Investors” or as “Major U.S. Institutional Investors” as defined in Rule 15a-6 under the Securities and Exchange Act of 1934, as amended. This communication is only for U.S. Institutional Investors or Major U.S. Institutional Investor whose ordinary business activities involve investing in shares, bonds, and associated securities and/or derivative securities and who have professional experience in such investments. Any person who is not a U.S. Institutional Investor or Major U.S. Institutional Investor must not rely on this communication. The delivery of this report to any person in the U.S. is not a recommendation to effect any transactions in the securities discussed herein, or an endorsement of any opinion expressed herein. If you are receiving this report in the U.S from RJA, a FINRA/SIPC member, it takes responsibility for the content of this report. For further information or to place an order in any of the above-mentioned securities please contact a registered representative of CGS-CIMB Securities (USA) Inc. or RJA. <https://raymondjames.com/InternationalEquityDisclosures>

Other jurisdictions: In any other jurisdictions, except if otherwise restricted by laws or regulations, this report is only for distribution to professional, institutional or sophisticated investors as defined in the laws and regulations of such jurisdictions.

Distribution of stock ratings and investment banking clients for quarter ended on 31 December 2021		
619 companies under coverage for quarter ended on 31 December 2021		
	Rating Distribution (%)	Investment Banking clients (%)
Add	71.1%	1.5%
Hold	21.8%	0.0%
Reduce	7.1%	0.0%

Spitzer Chart for stock being researched (2 year data)


Corporate Governance Report of Thai Listed Companies (CGR). CG Rating by the Thai Institute of Directors Association (Thai IOD) in 2021, Anti-Corruption 2021

ADVANC – Excellent, Certified, **AMATA** – Excellent, Certified, **ANAN** – Excellent, n/a, **AOT** – Excellent, n/a, **AP** – Excellent, Certified, **ASP** – Excellent, n/a, **AWC** – Excellent, Declared, **AU** – Good, n/a, **BAM** – Very Good, Certified, **BAY** – Excellent, Certified, **BBL** – Excellent, Certified, **BCH** – Very Good, Certified, **BCP** - Excellent, Certified, **BCPG** – Excellent, Certified, **BDMS** – Excellent, n/a, **BEAUTY** – Good, n/a, **BEM** – Excellent, n/a **BH** - Good, n/a, **BJC** – Very Good, n/a, **BLA** – Very Good, Certified, **BTS** - Excellent, Certified, **CBG** – Very Good, n/a, **CCET** – n/a, n/a, **CENTEL** – Excellent, Certified, **CHAYO** – Very Good, n/a, **CHG** – Very Good, n/a, **CK** – Excellent, n/a, **COM7** – Excellent, Certified, **CPALL** – Excellent, Certified, **CPF** – Excellent, Certified, **CPN** - Excellent, Certified, **CPNREIT** – n/a, n/a, **CRC** – Excellent, Declared, **DELTA** - Excellent, Certified, **DDD** – Excellent, n/a, **DIF** – n/a, n/a, **DOHOME** – Very Good, Declared, **DREIT** – n/a, n/a, **DTAC** – Excellent, Certified, **ECL** – Excellent, Certified, **EGCO** - Excellent, Certified, **EPG** – Excellent, Certified, **ERW** – Very Good, Certified, **GFPT** - Excellent, Certified, **GGC** – Excellent, Certified, **GLOBAL** – Excellent, n/a, **HANA** - Excellent, Certified, **HMPRO** - Excellent, Certified, **HUMAN** – Good, n/a, **ICHI** – Excellent, Certified, **III** – Excellent, Declared, **INTUCH** - Excellent, Certified, **IRPC** – Excellent, Certified, **ITD** – Very Good, n/a, **IVL** - Excellent, Certified, **JASIF** – n/a, n/a, **JKN** – n/a, Certified, **JMT** – Very Good, n/a, **KBANK** - Excellent, Certified, **KCE** - Excellent, Certified, **KEX** – Very Good, Declared, **KKP** – Excellent, Certified, **KSL** – Excellent, Certified, **KTB** - Excellent, Certified, **KTC** – Excellent, Certified, **LH** - Excellent, n/a, **LPN** – Excellent, Certified, **M** – Very Good, Certified, **MAKRO** – Excellent, Certified, **MC** – Excellent, Certified, **MEGA** – Very Good, n/a, **MINT** - Excellent, Certified, **MTC** – Excellent, Certified, **NETBAY** – Very Good, n/a, **NRF** – Very Good, Declared, **OR** – Excellent, n/a, **ORI** – Excellent, Certified, **OSP** – Excellent, n/a, **PLANB** – Excellent, Certified, **PRINC** – Very Good, Certified, **PR9** – Excellent, Declared, **PSH** – Excellent, Certified, **PTT** - Excellent, Certified, **PTTEP** - Excellent, n/a, **PTTGC** - Excellent, Certified, **QH** – Excellent, Certified, **RAM** – n/a, n/a, **RBF** – Very Good, n/a, **RS** – Excellent, Declared, **RSP** – Good, n/a, **S** – Excellent, n/a, **SAK** – Very Good, Declared, **SAPPE** – Very Good, Certified, **SAWAD** – Very Good, n/a, **SCB** - Excellent, Certified, **SCC** – Excellent, Certified, **SCGP** – Excellent, Declared, **SECURE** – n/a, n/a, **SHR** – Excellent, n/a, **SIRI** – Excellent, Certified, **SPA** – Very Good, n/a, **SPALI** - Excellent, Certified, **SPRC** – Excellent, Certified, **SSP** - Good, Certified, **STEC** – Excellent, n/a, **SVI** – Excellent, Certified, **SYNEX** – Very Good, Certified, **TCAP** – Excellent, Certified, **THANI** – Excellent, Certified, **TIDLOR** – n/a, Certified **TISCO** - Excellent, Certified, **TKN** – Very Good, n/a, **TOP** - Excellent, Certified, **TRUE** – Excellent, Certified, **TTB** - Excellent, Certified, **TU** – Excellent, Certified, **TVO** – Excellent, Certified, **VGI** – Excellent, Certified, **WHA** – Excellent, Certified, **WHART** – n/a, n/a, **WICE** – Excellent, Certified, **WORK** – Good, n/a.

- CG Score 2021 from Thai Institute of Directors Association (IOD)

- Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of August 5, 2021) are categorised into: companies that have declared their intention to join CAC, and companies certified by CAC.

Recommendation Framework
Stock Ratings

Definition:

Add	The stock's total return is expected to exceed 10% over the next 12 months.
Hold	The stock's total return is expected to be between 0% and positive 10% over the next 12 months.
Reduce	The stock's total return is expected to fall below 0% or more over the next 12 months.

The total expected return of a stock is defined as the sum of the: (i) percentage difference between the target price and the current price and (ii) the forward net dividend yields of the stock. Stock price targets have an investment horizon of 12 months.

Sector Ratings

Definition:

Overweight	An Overweight rating means stocks in the sector have, on a market cap-weighted basis, a positive absolute recommendation.
Neutral	A Neutral rating means stocks in the sector have, on a market cap-weighted basis, a neutral absolute recommendation.
Underweight	An Underweight rating means stocks in the sector have, on a market cap-weighted basis, a negative absolute recommendation.

Country Ratings

Definition:

Overweight	An Overweight rating means investors should be positioned with an above-market weight in this country relative to benchmark.
Neutral	A Neutral rating means investors should be positioned with a neutral weight in this country relative to benchmark.
Underweight	An Underweight rating means investors should be positioned with a below-market weight in this country relative to benchmark.

