

招商银行全资附属机构 A Wholly Owned Subsidiary Of China Merchants Bank

Sunny Optical (2382 HK)

Strong 1H19; Accelerated lens upgrade cycle

Summary. Sunny delivered a strong 1H19 revenue/net profit growth of 30%/21% YoY. Net profit is largely in-line, while revenue is 8%/14% above our/ consensus estimates due to higher lens ASP/margin despite lower CCM GPM. We raised our SOTP-based TP to HK\$114 (22% upside), as we lifted our FY19-21E EPS by 7-21% to reflect higher guidance, product mix and margin upside. Sunny is our sector top pick, given clear upgrade trend and strong earnings visibility.

- Strong HLS ASP/margin despite weak CCM GPM. We are surprised by Sunny's strong CCM/HLS ASP of RMB5.2/ RMB46.8 (-8%/14% YoY), which are 13%/15% above our estimates, thanks to faster spec upgrade and better product mix. Despite CCM GPM reaching historical low at 5.9% in 1H19 due to low yield of periscope-cam and production line upgrade, mgmt. expected CCM GPM to rebound significantly in 2H19 driven by higher yield, improved automation and better competitive landscape.
- FY19E guidance raised on CAPEX/shipment/capacity. Mgmt. lifted CAPEX guidance by 33% to RMB4bn (from RMB3bn) with RMB2bn/1bn/1bn for HLS/HCM/new factory. In addition, Sunny raised FY19E HLS shipment guidance to 30% YoY (from 25-30% YoY), while maintaining guidance for CCM (20-25% YoY) and VLS (25% YoY). As for capacity, HLS/CCM monthly capacity guidance is raised to 150kk/75kk (from 140kk/65kk).
- Strong pipeline in auto-cam module, ADAS, Lidar. In addition to strong VLS momentum, Sunny started to mass produce HD surrounding-view vehicle-cam module and completed R&D of 8MP front-view vehicle camera module for ADAS. Mgmt. believes it will allow Sunny to capture Lv3-4 ADAS opportunity in 2020-22E, given regulatory requirement in US, EU and Japan.
- R&D breakthrough in CCM/HLS to drive growth. Sunny completed R&D in 64MP large image size (1/1.7") and ultra-macro shooting (3cm) handset lens, and mass produced ultra-wide angle, ultra-miniaturized head, 7P ultra-large aperture handset lens. For CCM, R&D on OLA production line and IOM semi packaging are completed, which will drive margin recovery in 2H19E.
- Reiterate BUY; Raised TP to HK\$114 (22% upside). Given strong 1H19 results, higher guidance and margin upside, we raised our FY19-21E EPS by 7%/15%21%, and our SOTP-based TP is lifted to HK\$114 (from HK\$100.7). We think the stock will be further re-rated in near term given positive results, share gain in Huawei/Samsung, and strong 3Q19 shipment.

Earnings Summary

J					
(YE 31 Dec)	FY17A	FY18A	FY19E	FY20E	FY21E
Revenue (RMB mn)	22,366	25,932	35,651	41,962	47,192
YoY growth (%)	53.1	15.9	37.5	17.7	12.5
Net income (RMB mn)	2,902	2,491	3,415	4,729	5,985
EPS (RMB)	2.7	2.3	3.1	4.3	5.5
YoY growth (%)	126.8	(14.6)	37.1	38.5	26.6
P/E (x)	31.4	36.8	26.8	19.4	15.3
P/B (x)	12.0	9.7	7.7	6.0	4.7
Yield (%)	0.3	8.0	1.1	1.5	1.9
ROE (%)	39	27	29.1	31.3	31

Source: Company data, CMBIS estimates

BUY (Maintain)

Target Price HK\$114.0 (Previous TP HK\$100.70)
Up/Downside +22.0%
Current Price HK\$93.95

China Technology Sector

Alex Ng

(852) 3900 0881 alexng@cmbi.com.hk

Iris Zhang

(852) 3761 8780 iriszhang@cmbi.com.hk

Stock Data

Mkt Cap (HK\$ mn)	103,049
Avg 3 mths t/o (HK\$ mn)	691.62
52w High/Low (HK\$)	109.60/58.55
Total Issued Shares (mn)	1,096.8
Source: Bloomberg	

9

Shareholding StructureSUN XU LTD35.47%JPMORGAN CHASE4.19%WENJIAN WANG3.08%

Source: HKEx

Share Performance

	Absolute	Relative
1-mth	9.2%	22.9%
3-mth	6.6%	18.5%
6-mth	6.0%	19.1%

Source: Bloomberg

12-mth Price Performance



Source: Bloomberg

Auditor: Deloitte Touche Tohmatsu

Related Reports:

- Sunny Optical (2382 HK) Riding on O-film weakness; Lift TP to HK\$96.3 – 10 Jul 2019
- 2. Sunny Optical (2382 HK) 1H Preview – 12 Aug 2019

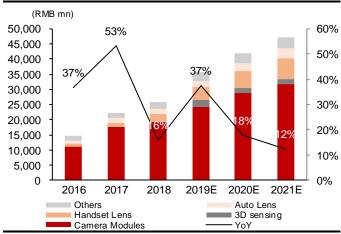
Please cast your valuable vote for CMBI research team in the 2019 Asiamoney Brokers Poll:

https://euromoney.com/brokers



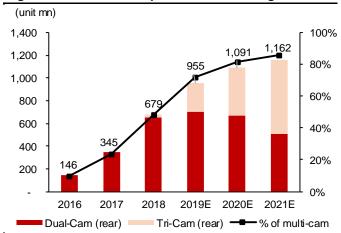
Focus Charts

Figure 1: Sunny revenue trend



Source: Company data, CMBIS estimates

Figure 3: Multi-cam shipment is increasing



Source: Company data, CMBIS estimates

Figure 5: Sunny's handset lens sets



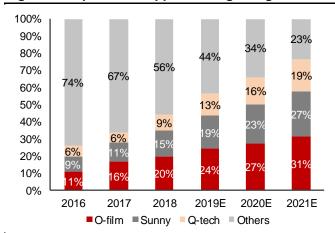
Source: Company data, CMBIS estimates

Figure 2: CCM suppliers client mapping

	Market Share	Apple	Samsung	Huawei	Xiaomi	ОРРО	VIVO
O-Film	15.6%	Х		Χ	Х	Х	Χ
Sunny	13.0%		Х	Х	Х	Х	Х
Q-tech	7.0%			Х	Х	Х	Х
Truly	5.5%				Х	Х	Х
LGI	5.0%	Х					
SEMCO	3.0%		Х		Х		Х
Lite-on	2.2%		Х	Х	Х	Х	Х
Sharp	3.4%	Х					
Cowell	2.9%	Х					

Source: TSR, CMBIS, *market share estimate in 2018

Figure 4: Top 3 CCM suppliers are gaining shares



Source: Company data, CMBIS estimates

Figure 6: Ample room in autonomous driving



Source: Company data, CMBIS estimates



1H19 results review

Figure 7: 1H19 results review

					СМВІ		Conse	nsus
RMB mn	1H18	2H18	1H19	YoY	1H19E	Diff (%)	1H19E	Diff (%)
Revenue	11,976	13,955	15,575	30%	13,667	14%	14,440	8%
Gross profit	2,320	2,593	2,864	23%	2,581	11%	2,649	8%
Operating profit	1,513	1,565	1,789	18%	1,754	2%	1,567	14%
Net profit	1,180	1,311	1,431	21%	1,443	-1%	1,389	3%
EPS (HKD)	1.08	1.20	1.31	21%	1.32	-1%	1.29	2%
Gross margin	19.4%	18.6%	18.4%	-1 ppt	18.9%	-0.5 ppt	18.3%	0 ppt
Operating margin	12.6%	11.2%	11.5%	-1.1 ppt	12.8%	-1.3 ppt	10.9%	0.6 ppt
Net margin	9.9%	9.4%	9.2%	-0.7 ppt	10.6%	-1.4 ppt	9.6%	-0.4 ppt

Source: Company data, Bloomberg, CMBIS estimates

Figure 8: 1H19 revenue breakdown

					СМВІ	
RMB mn	1H18	2H18	1H19	YoY	1H19E	Diff (%)
Optical Comp (Auto/ handset lens)	2,656	3,367	3,774	42%	3,506	8%
Auto lens ASP (RMB)	39.9	38.2	41.6	4%	40.0	4%
Handset lens ASP (RMB)	4.6	4.2	5.2	14%	4.6	13%
Optoelectronic (Camera modules)	9,187	10,422	11,680	27%	10,034	16%
CCM ASP (RMB)	50.8	41.1	46.8	-8%	40.7	15%
Optical instruments	133	167	122	-9%	126	-4%
Gross Margin						
Optical Components	42.0%	41.1%	44.1%	2.1 ppt	42.0%	2.1 ppt
Optoelectronic products	9.4%	7.5%	5.9%	-3.5 ppt	7.3%	-1.4 ppt
Optical instruments	38.3%	42.3%	41.2%	2.9 ppt	42.0%	-0.8 ppt
Total	19.37%	18.58%	18.39%	-1 ppt	19.0%	-0.5 ppt

Source: Company data, CMBIS estimates

Our EPS are 5-9% above consensus

Figure 9: Earnings revision

(DMD mm)		New			Old		С	hange (%)	
(RMB mn)	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E
Revenue	35,651	41,962	47,192	30,216	38,114	41,522	18%	10%	14%
Gross profit	6,807	8,871	10,683	5,941	7,765	9,005	15%	14%	19%
Operating profit	4,190	5,682	7,144	3,882	4,964	5,953	8%	14%	20%
Net profit	3,415	4,729	5,985	3,189	4,116	4,959	7%	15%	21%
EPS (RMB)	3.13	4.33	5.48	2.92	3.77	4.54	7%	15%	21%
Gross margin	19.1%	21.1%	22.6%	19.7%	20.4%	21.7%	-0.6%	0.8%	1.0%
Operating margin	11.8%	13.5%	15.1%	12.8%	13.0%	14.3%	-1.1%	0.5%	0.8%
Net Margin	9.6%	11.3%	12.7%	10.6%	10.8%	11.9%	-1.0%	0.5%	0.7%

Sources: Company data, CMBIS

Figure 10: CMBI estimates vs consensus

	СМВІ				Consensus		Diff (%)		
US\$ mn	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E	FY19E	FY20E	FY21E
Revenue	35,651	41,962	47,192	33,021	40,265	46,132	8%	4%	2%
Gross Profit	6,807	8,871	10,683	6,413	8,233	9,714	6%	8%	10%
Operating Profit	4,190	5,682	7,144	3,830	5,095	6,097	9%	12%	17%
Net profit	3,415	4,729	5,985	3,401	4,501	5,452	0%	5%	10%
EPS (US\$ cents)	3.13	4.33	5.48	3.11	4.13	5.04	0%	5%	9%
Gross Margin	19.1%	21.1%	22.6%	19.4%	20.4%	21.1%	-0.3 ppt	0.7 ppt	1.6 ppt
Operating Margin	11.8%	13.5%	15.1%	11.6%	12.7%	13.2%	0.2 ppt	0.9 ppt	1.9 ppt
Net Margin	9.6%	11.3%	12.7%	10.3%	11.2%	11.8%	-0.7 ppt	0.1 ppt	0.9 ppt

Source: Company data, CMBIS



Figure 11: Major assumptions

	FY16	FY17	FY18	FY19E	FY20E	FY21E
Shipment volume (mn unit)						
Optical Components						
Handset lens sets	379	608	951	1,257	1,599	1,940
YoY(%)	26%	60%	56%	32%	27%	21%
Vehicle lens sets	23	32	40	50	62	75
YoY(%)	37%	41%	25%	25%	23%	22%
Optoelectronic Products						
Handset camera modules	270	325	425	529	646	768
YoY(%)	18%	20%	31%	24%	22%	19%
Other optoelectronic (3D sensing)	5	8	10	40	50	60
YoY(%)	25%	76%	27%	293%	26%	20%
Revenue (Rmb mn)						
Optical Components	2,956	4,302	6,023	8,642	10,844	13,142
Optoelectronic Products	11,403	17,777	19,609	26,741	30,823	33,725
Optical instruments	253	294	300	268	295	324
Total Revenue	14,612	22,372	25,932	35,651	41,962	47,192
YoY (%)	36.6%	53.1%	15.9%	37.5%	17.7%	12.5%
Gross Margin	18.3%	21.5%	18.9%	19.1%	21.1%	22.6%
Optical Components	39.8%	44.0%	41.5%	44.3%	44.9%	45.4%
Optoelectronic products	10.5%	13.1%	8.4%	7.0%	8.3%	8.9%
Optical instruments	40.4%	43.2%	40.5%	41.6%	42.5%	42.5%

Source: Company data, CMBIS estimates

Figure 12: P&L forecast

RMB mn	FY17	FY18	1H19	2H19E	FY19E	FY20E	FY21E
Revenue	22,366	25,932	15,575	20,076	35,651	41,962	47,192
YoY	53.1%	15.9%	30.0%	43.9%	37.5%	17.7%	12.5%
Cost of sales	(17,563)	(21,019)	(12,711)	(16,133)	(28,844)	(33,091)	(36,509)
Gross profit	4,803	4,913	2,864	3,943	6,807	8,871	10,683
GPM (%)	21.5%	18.9%	18.4%	19.6%	19.1%	21.1%	22.6%
YoY	79.2%	2.3%	23.4%	52.0%	38.5%	30.3%	20.4%
SG&A	(594)	(644)	(388)	(518)	(906)	(1,049)	(1,180)
% of rev	-2.7%	-2.5%	-2.5%	-2.6%	-2.5%	-2.5%	-2.5%
R&D	(1,168)	(1,362)	(827)	(1,205)	(2,031)	(2,392)	(2,643)
% of rev	-5.2%	-5.3%	-5.3%	-6.0%	-5.7%	-5.7%	-5.6%
Operating profit	3,383	3,077	1,789	2,401	4,190	5,682	7,144
OPM (%)	15.1%	11.9%	11.5%	12.0%	11.8%	13.5%	15.1%
YoY	129.4%	-9.0%	18.3%	53.4%	36.2%	35.6%	25.7%
Net profit	2,902	2,491	1,431	1,984	3,415	4,729	5,985
NPM (%)	13.0%	9.6%	9.2%	9.9%	9.6%	11.3%	12.7%
YoY	128.3%	-14.2%	21.3%	51.3%	37.1%	38.5%	26.6%

Source: Company data, CMBIS estimates



Valuation

Reiterate BUY with new TP of HK\$114 (22% upside)

We derived our 12-month TP from SOTP valuation methodology and our TP of HK\$114 is based on weighted-average target P/E multiple of 23.6x FY20E EPS, in order to reflect 1) Sunny's diversification in multiple businesses with different growth profiles, and 2) higher visibility of product upcycles across different segments.

We assign 18x P/E to its CCM business, in-line with the target multiple we apply to HK-listed component leader, given its China No.1 position, product upcycle and advanced technology capacity. We assign 30x P/E for its vehicle lens business to reflect the high-margin and high-growth industry nature of vehicle lens (20% CAGR FY19-21E) and Sunny's no.1 global market share, compared to global ADAS peers' 25x forward P/E. We apply a 25x P/E to its handset lens segment given its continued share gains from peers and robust shipment momentum (20% sales CAGR FY19-21E).

Figure 13: Sunny Optical - SOTP valuation

Business segment	% of FY20E Profit	FY20E EPS (RMB)	Target P/E
Camera modules	29.0%	1.25	18x
Handset lenses	42.9%	1.86	25x
Vehicle lenses	12.0%	0.52	30x
Others	16.1%	0.70	25x
Total (RMB) /Implied P/E		4.33	23.6x
TP (HK\$)			114

Sources: Company data, CMBIS

Figure 14: Peers' valuation

			Market	2		Up/						
			Сар	Price	TP	Down	P/E	(x)	P/E	(x)	ROE	(%)
Company	Ticker	Rating	(US\$ mn)	(LC)	(LC)	-side	FY19E	FY20E	FY19E	FY20E	FY19E	FY20E
Sunny Optical	2382 HK	Buy	13,136	93.95	104	22%	28.8	19.4	7.7	6.0	29.1	31.3
Q tech	1478 HK	Buy	1,095	7.52	9.5	27%	18.5	14.2	3.0	2.6	16.4	18.0
Cowell	1415 HK	NR	135	1.27	NA	NA	9.0	6.2	0.4	0.4	5.8	5.8
Truly	732 HK	NR	403	0.96	NA	NA	4.1	4.3	0.4	0.3	5.1	8.3
Catcher	2474 TT	NR	5,427	221	NA	NA	11.1	9.1	1.1	1.0	10.0	11.5
Largan	3008 TT	NR	16,484	3855	NA	NA	17.9	15.5	4.0	3.4	24.2	23.8
Lite-on	2301 TT	NR	3,452	46.30	NA	NA	12.9	12.2	1.4	1.4	11.1	11.5
Primax	4915 TT	NR	886	62.20	NA	NA	12.8	10.7	1.8	1.6	14.0	15.0
O-film	002456 CH	NR	3,271	8.46	NA	NA	17.0	11.3	2.2	1.9	14.8	14.8
			Average				14.6	11.7	2.5	2.1	14.3	15.3

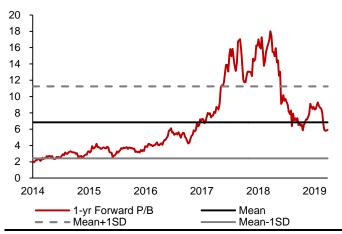
Source: Bloomberg, CMBIS

Figure 15: 12M forward P/E band

80 70 60 50 40 30 20 10 0 2014 2015 2016 2017 2018 2019 1-yr Forward P/E Mean - Mean+1SD Mean-1SD

Source: Company data, CMBIS

Figure 16: 12M forward P/B band



Source: Company data, CMBIS



Financial Sun	nmary	/									
Income statement						Cash flow summary					
YE 31 Dec (RMB mn)	FY17A	FY18A	FY19E	FY20E	FY21E		FY17A	FY18A	FY19E	FY20E	FY21E
Revenue	22,366	25,932	35,651	41,962	47,192	Profit before taxation	3,318	2,851	3,936	5,404	6,839
Cost of sales	(17,563)	(21,019)	(28,844)	(33,091)	(36,509)	Depreciation/amortisation	535	819	1,002	1,365	1,729
Gross profit	4,803	4,913	6,807	8,871	10,683	Change in working capital	(1,126)	(203)	(40)	(1,072)	114
						Others	(290)	100	(279)	(397)	(542)
Selling expenses	(205)	(210)	(287)	(336)	(378)	Net cash from operating	2,436	3,568	4,619	5,300	8,141
Admin expenses	(389)	(434)	(619)	(713)	(802)						
R&D expenses	(1,168)	(1,362)	(2,031)	(2,392)	(2,643)	Capex	(1,128)	(2,104)	(4,000)	(4,000)	(4,000)
Other income	206	467	408	462	519	Other	(558)	(3,395)	0	0	C
Other gain/ losses	136	(293)	(87)	(210)	(236)	Net cash from investing	(1,686)	(5,499)	(4,000)	(4,000)	(4,000)
Operating profit	3,383	3,077	4,190	5,682	7,144						
						Net borrowings	444	88	0	0	C
Financial costs	(49)	(202)	(238)	(261)	(288)	Dividend paid	(318)	(725)	(994)	(1,377)	(1,742)
Investment income	(16)	(24)	(17)	(17)	(17)	Purchase of shares	(81)	(78)	0	0	C
Pre-tax profit	3,318	2,851	3,936	5,404	6,839	Other	(33)	3,672	(238)	(261)	(288)
•						Net cash from financing	12	2,957	(1,232)	(1,638)	(2,030)
Income tax expense	(404)	(339)	(501)	(648)	(821)	J					
NCI	13	22	19	27	34	Net change in cash	762	1,025	(613)	(338)	2,111
Net profit	2,902	2,491	3,415	4,729	5,985	Cash at beginning of the year	467	1,227	2,254	1,641	1,303
						Exchange difference	(2)	2	0	0	O
						Cash at the end of the year	1,227	2,254	1,641	1,303	3,414
Balance sheet						Key ratios					
YE 31 Dec (RMB mn)	FY17A	FY18A	FY19E	FY20E	FY21E	YE 31 Dec	FY17A	FY18A	FY19E	FY20E	FY21E
Current assets	11,635	16,768	21,349	19,767	26,364	Sales mix (%)					
Cash & equivalents	1,227	2,254	1,641	1,303	3,414	Optical components	19.2	23.2	24.2	25.8	27.8
Financial assets	1,952	4,760	4,760	4,760	4,760	Optoelectronic products	79.5	75.6	75.0	73.5	71.5
Deposits	160	235	235	235	235	Optical instruments	1.3	1.2	0.8	0.7	0.7
Account receivables	5,666	6,231	8,722	8,879	10,916	•					
Inventories	2,622	3,074	5,777	4,377	6,826	Growth (%)					
Other current assets	8	214	214	214	214	Revenue	53.1	15.9	37.5	17.7	12.5
						Gross profit	79.2	2.3	38.5	30.3	20.4
Non-current assets	4,091	6,084	9,098	11,743	14,022	Operating profit	129.4	(9.0)	36.2	35.6	25.7
Prepaid lease	163	214	214	214	214	Net profit	128.3	(14.2)	37.1	38.5	26.6
PPE	2,586	4,523	7,521	10,155	12,426	·		` ,			
Interest in associates	125	101	101	101	101	Profit & loss ratio (%)					
Other non-curr. assets	1,217	1,246	1,262	1,273	1,281	Gross margin	21.5	18.9	19.1	21.1	22.6
Total assets	15,726	22,852	30,447	31,510	40,387	•	15.1	11.9	11.8	13.5	15.1
	-,	,	,	- ,	-,	Net profit margin	13.0	9.6	9.6		12.7
Current liabilities	7,705	8,677	13,832	11,516	16,117	- · F · - · · · · · · · · · · · · · · ·				_	
O.T.1	1,010	4 400	4.400	4.400	4 400						

Source: Company data, CMBIS estimates

1,348

6,183

490

502

502

105

31

7,383

7,519

15,726

8,207

1,482

7,064

5,628

4,887

4,887

13,564

105

54

9,129

9,288

22,852

1,482

2,914

4,887

4,887

18,718

11,550

11,728

30,447

105

73

12,218

1,482

9,903

8,609

4,887

4.887

105

100

16,403

14,902

15,107

31,510

8,285

4,887

4,887

105

133

40,387 DPS

19,145

19,384

1,482 Balance sheet ratio

21,003 Profitability (%)

ROE

ROA

EPS

14,503 Net debt/total equity (x)

Current ratio (x)

Receivable turnover days

Inventory turnover days

Payable turnover days

Per share data (RMB)

0.1

1.5

77

57

122

38.6

18.5

2.67

0.29

1.9

77

57

122

26.8

10.9

2.28

0.66

0.0 Net cash Net cash

1.5

76.6

56.0

122.0

29.1

11.2

3.13

0.91

ST borrowings

LT borrowings

Total liabilities

Share capital

Minority interest

Shareholders' equity

Total equity & liabilities

Reserves

Others

Account payables

Other current liabilities

Non-current liabilities

0.0

1.6

76.6

56.0

30.9

14.8

5.48

1.59

122.0

1.7

76.6

56.0

122.0

31.3

15.0

4.33

1.26



Disclosures & Disclaimers

Analyst Certification

The research analyst who is primary responsible for the content of this research report, in whole or in part, certifies that with respect to the securities or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about the subject securities or issuer; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific views expressed by that analyst

Besides, the analyst confirms that neither the analyst nor his/her associates (as defined in the code of conduct issued by The Hong Kong Securities and Futures Commission) (1) have dealt in or traded in the stock(s) covered in this research report within 30 calendar days prior to the date of issue of this report; (2) will deal in or trade in the stock(s) covered in this research report 3 business days after the date of issue of this report; (3) serve as an officer of any of the Hong Kong listed companies covered in this report; and (4) have any financial interests in the Hong Kong listed companies covered in this report.

CMBIS Ratings

: Stock with potential return of over 15% over next 12 months HOLD Stock with potential return of +15% to -10% over next 12 months SELL NOT RATED : Stock with potential loss of over 10% over next 12 months

: Stock is not rated by CMBIS

OUTPERFORM : Industry expected to outperform the relevant broad market benchmark over next 12 months MARKET-PERFORM : Industry expected to perform in-line with the relevant broad market benchmark over next 12 months UNDERPERFORM : Industry expected to underperform the relevant broad market benchmark over next 12 months

CMB International Securities Limited

Address: 45/F, Champion Tower, 3 Garden Road, Hong Kong, Tel: (852) 3900 0888 Fax: (852) 3900 0800

CMB International Securities Limited ("CMBIS") is a wholly owned subsidiary of CMB International Capital Corporation Limited (a wholly owned subsidiary of China Merchants Bank)

Important Disclosures

There are risks involved in transacting in any securities. The information contained in this report may not be suitable for the purposes of all investors. CMBIS does not provide individually tailored investment advice. This report has been prepared without regard to the individual investment objectives, financial position or special requirements. Past performance has no indication of future performance, and actual events may differ materially from that which is contained in the report. The value of, and returns from, any investments are uncertain and are not guaranteed and may fluctuate as a result of their dependence on the performance of underlying assets or other variable market factors. CMBIS recommends that investors should independently evaluate particular investments and strategies, and encourages investors to consult with a professional financial advisor in order to make their own investment decisions.

This report or any information contained herein, have been prepared by the CMBIS, solely for the purpose of supplying information to the clients of CMBIS or its affiliate(s) to whom it is distributed. This report is not and should not be construed as an offer or solicitation to buy or sell any security or any interest in securities or enter into any transaction. Neither CMBIS nor any of its affiliates, shareholders, agents, consultants, directors, officers or employees shall be liable for any loss, damage or expense whatsoever, whether direct or consequential, incurred in relying on the information contained in this report. Anyone making use of the information contained in this report does so entirely at their own risk.

The information and contents contained in this report are based on the analyses and interpretations of information believed to be publicly available and reliable. CMBIS has exerted every effort in its capacity to ensure, but not to guarantee, their accuracy, completeness, timeliness or correctness. CMBIS provides the information, advices and forecasts on an "AS IS" basis. The information and contents are subject to change without notice. CMBIS may issue other publications having information and/ or conclusions different from this report. These publications reflect different assumption, point-of-view and analytical methods when compiling. CMBIS may make investment decisions or take proprietary positions that are inconsistent with the recommendations or views in this report.

CMBIS may have a position, make markets or act as principal or engage in transactions in securities of companies referred to in this report for itself and/or on behalf of its clients from time to time. Investors should assume that CMBIS does or seeks to have investment banking or other business relationships with the companies in this report. As a result, recipients should be aware that CMBIS may have a conflict of interest that could affect the objectivity of this report and CMBIS will not assume any responsibility in respect thereof. This report is for the use of intended recipients only and this publication, may not be reproduced, reprinted, sold, redistributed or published in whole or in part for any purpose without prior written

Additional information on recommended securities is available upon request.

For recipients of this document in the United Kingdom

This report has been provided only to persons (I)falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended from time to time) ("The Order") or (II) are persons falling within Article 49(2) (a) to (d) ("High Net Worth Companies, Unincorporated Associations, etc.,) of the Order, and may not be provided to any other person without the prior written consent of CMBIS.

This report is intended for distribution in the United States to "major US institutional investors", as defined in Rule 15a-6 under the US, Securities Exchange Act of 1934, and may not be furnished to any other person in the United States. Each major US, institutional investor that receives a copy of this research report by its acceptance hereof represents and agrees that it shall not distribute or provide this research report to any other person.

For recipients of this document in Singapore

This report is distributed in Singapore by CMBI (Singapore) Pte. Limited (CMBISG) (Company Regn. No. 201731928D), an Exempt Financial Adviser as defined in the Financial Advisers Act (Cap. 110) of Singapore and regulated by the Monetary Authority of Singapore. CMBISG may distribute reports produced by its respective foreign entities, affiliates or other foreign research houses pursuant to an arrangement under Regulation 32C of the Financial Advisers Regulations. Where the report is distributed in Singapore to a person who is not an Accredited Investor, Expert Investor or an Institutional Investor, as defined in the Securities and Futures Act (Cap. 289) of Singapore, CMBISG accepts legal responsibility for the contents of the report to such persons only to the extent required by law. Singapore recipients should contact CMBISG at +65 6350 4400 for matters arising from, or in connection with the report.