ASM Pacific HK\$79.00 - SELL

Nicolas Baratte

nicolas.baratte@clsa.com +852 2600 8325

Cherry Ma

+852 2600 8704

6 March 2015

Hong Kong **Technology**

Reuters Bloomberg 0522.HK

Priced on 5 March 2015

HK HSI @ 24,193.0

12M hi/lo HK\$91.15/64.65

12M price target HK\$66.77 -15% ±% potential

Shares in issue 396.1m 60.3% Free float (est.)

US\$4,100m Market cap

3M average daily volume HK\$43.5m (US\$5.6m)

Major shareholders ASM Pacific Holding 39.8%

Stock performance (%)



www.clsa.com

Weak 4Q14, weak 1Q15

Slow growth, rich valuations, maintain Sell

ASM Pac reported a weak 4Q14 with sales declining -29% QoQ, Operating Profit -9% below Consensus and EPS -41% below. We expect a slight decline in revenues in 2015 and slow EPS growth in 2015 and 2016, at +5% and +9% YoY. The stock is trading at 3.3x 2016CL book value for a 20% ROE, the most expensive semi stock in Hong Kong / Taiwan, which is the main reason why we maintain our Sell rating, fair value HK\$66.77.

4Q14 miss on multiple levels

4Q14 revenues were disappointing at HK\$3.45bn, declining -29% QoQ, worse than book-to-bill suggested on orders pushed-out to 1Q15. ASM mentioned that clients' capex requirements were mostly fulfilled by 3Q14, delaying deliveries to 1Q15. High Opex, especially high R&D expenditures brings Operating Profits -9% below consensus. The miss at the Profit Before Tax level increases to -35% below Consensus, EPS -41% below Consensus and -51% below CLSA.

1Q15 to be weak again, management expecting growth in 2Q15

Book-to-bill suggests 1Q15 revenues will decline by -20% to -25% QoQ; management guidance for 1Q book-to-bill suggests +15% to +20% revenue growth in 2Q15 as high equipment deliveries of 2Q-3Q14 are digested. This highlights, in our opinion, a seasonal slowdown in Equipment demand from Camera Module makers in China and in SMT demand for smartphone. This means that 1H15 revenues will likely be flat YoY (we forecast +1%) and that 2H15 revenues must increase by +38% HoH for 2015 revenues to be flat YoY. Not impossible but certainly demanding.

A mixed bag of positive LED and Camera Module demand against weak semi demand

We believe that ASM Pac benefitted in 2014 from strong capex from Camera Module makers and LED packagers in China as well as large volume growth for US smartphone brand (SMT). We expect Camera Module and LED demand to be sustainable, but not to increase in 2015. On the flip side, we believe that wire-bonding demand from semis will decline. A mixed bag that offers little room for revenue growth, in our opinion.

Upgrade earnings, reiterate SELL

We have increased our net income forecast by +2% for 2015 and +23% for 2016. The stock is trading at 3.3x 2016CL book value for a 20% ROE, the most expensive semi stock in Hong Kong / Taiwan. We retain our Sell rating and base our fair value on 3.0x 2015CL book value or fair value of HK\$ 66.77.

Financials

Year to 31 December	12A	13A	14CL	15CL	16CL
Revenue (HK\$m)	10,461	10,841	14,229	13,488	14,979
Rev forecast change (%)	-	-	2.3	(8.8)	9.1
Net profit (HK\$m)	689	559	1,600	1,674	1,829
NP forecast change (%)	-	-	10.3	2.1	23.4
EPS (HK¢)	172.6	139.4	397.5	415.8	454.4
CL/consensus (14) (EPS%)	-	-	92	82	80
EPS growth (% YoY)	(76.6)	(19.2)	185.1	4.6	9.3
PE (x)	45.8	56.7	19.9	19.0	17.4
Dividend yield (%)	1.8	0.8	2.7	2.9	3.7
ROE (%)	10.7	8.2	20.9	19.5	19.7
PB (x)	4.8	4.5	3.9	3.5	3.3
0.04					

Source: CLSA



4Q14 review: a weak quarter

4Q14 revenues were disappointing at HK\$3.45bn, declining -29% QoQ. Bookto-bill reported with 3Q14 results suggested that 4Q14 revenues would decline by -16% QoQ. Orders were pushed-out from 4Q14 to 1Q15, but not cancelled according to ASM.

On the positive side, Gross margin improved by +216 bps QoQ On the positive side, Gross margin improved by +216 bps QoQ in 4Q14 from cost reduction efforts in the Back-end Equipment business, as well as better sales and product mix in Europe for the SMT business, helped by Euro depreciation.

However, Opex ratio increased to 23.7% from 9M14 average of 19.5% due to amortisation cost in DEK business and increasing R&D expenditures. The tax rate was also higher at 28% due to one-off tax expense and provision.

4Q14 EPS -41% below Consensus and -51% below CLSA.

Figure 1

ASM Pac 4Q14	ASM Pac 4Q14 versus Consensus										
522 HK ASMPT	Dec-13 4Q13 actual	Mar-14 1Q14 actual	2Q14	Sep-14 3Q14 actual	4Q14	YoY	QoQ	Dec-14 4Q14 CLSA	versus CLSA	Dec-14 3Q14 consensus	versus consensus
revenue	2,764	2,493	3,438	4,852	3,446	25%	-29%	4,585	-25%	3,888	-11%
gross profit	749	808	1,196	1,737	1,308	75%	-25%	1,527	-14%	1,305	0%
gross margin	27%	32%	35%	36%	38%	10.9 pct pts	2.2 pct pts	33%		33.6%	
operating profit	103	211	513	905	490	376%	-46%	610	-20%	538	-9%
operating margin	3.7%	8.5%	14.9%	18.6%	14.2%	10.5 pct pts	-4.5 pct pts	13.3%	6.9%	13.8%	2.9%
PBT	13	198	508	985	337	2491%	-66%	610	-45%	517	-35%
tax	34	-41	-91	-202	-93			-109	15%	-101	8%
net income	47	157	417	782	244	416%	-69%	500	-51%	415	-41%
EPS HK ₡	0.12	0.39	1.04	1.95	0.61	416%	-69%	1.25	-51%	1.03	-41%

Source: CLSA, Company

Back-end equipment and SMT were both weak

Looking at revenue segments, the 2 critical segments, back-end equipment and SMT were both weak:

Figure 2

rigure z									
AS Pac 4Q14 by segment									
522 HK ASMPT	Dec-13 4Q13	Mar-14 1Q14	Jun-14 2Q14	Sep-14 3Q14	Dec-14 4Q14	YoY	QoQ		
Bill US\$ m	356	321	443	625	444	25%	-29%		
Book US\$ m	292	403	631	533	343	17%	-36%		
book/bill	0.82	1.26	1.42	0.85	0.77				
Equipments									
revenues	1,240	1,269	1,851	2,168	1,516	22%	-30%		
segment result	71	171	388	564	249	249%	-56%		
segment margin	5.8%	13.5%	21.0%	26.0%	16.4%	10.7 pct pts	-9.6 pct pts		
Lead frame									
revenues	397	443	506	503	450	13%	-10%		
segment result	25	37	57	44	36	44%	-17%		
segment margin	6.3%	8.4%	11.2%	8.7%	8.1%	1.8 pct pts	-0.6 pct pts		
SMT									
revenues	1,127	782	1,080	2,181	1,480	31%	-32%		
segment result	79	19	109	365	237	199%	-35%		
segment margin	7.0%	2.5%	10.1%	16.7%	16.0%	9 pct pts	-0.8 pct pts		

Source: CLSA, Company



- back-end equipment revenues declined -30% QoQ and net profit margin declined 10 percentage points to 16%
- SMT revenues declined -32% QoQ and net profit margin was flat at 16%

2Q15 revenue to increase QoQ Management mentioned that bookings in 1Q15 will incre

Management mentioned that bookings in 1Q15 will increase by 10% to 20% QoQ which suggests 2Q15 revenues increasing by +15% to +20% QOQ.

Bookings in 1Q15 to increase, suggesting revenue to rise in 2Q15

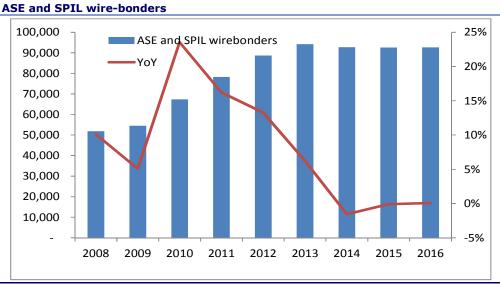
Back-End equipment demand

We estimate that ASM Pacific's back-end equipment demand can be broken down into 3 main segments:

• Conventional semi demand which, in our opinion is slightly declining. The figure below shows the number of wire-bonders of ASE ad SPIL which is flat from 2014 (Bruce Lu, CAST). We realize that ASE and SPIL have higher exposure to leading edge chips that are migrating faster to flip chip packages, which makes the firms not representative of the total market. Yet, we think that end-market demand growth is at best growing at par with semi global production or +3% per year.

ASM Pacific's back-end equipment demand broken down into 3 main segments

Figure 3



Source: CLSA, Companies

- LED demand which should be flattish as capacity additions are slow and concentrated on San An Opto in China
- Camera Module demand from Chinese makers which reached the peak of capacity increase in 2014.



Figure 4

Camera Module capacity in China (m/y)									
camera module capacity	2013	2014	2015	2016					
Sunny Optical	138	185	235	292					
Q-Tech	48	83	112	150					
O-film	26	100	150	170					
Truly	89	101	122	146					
Total	301	469	618	758					
capacity addition		168	149	140					

Source: CLSA, Companies

We have taken a constructive view on margins

Forecasts and Valuation

We have cut our 2015 revenues by -9% on weak back-end demand as highlighted above but have taken a constructive view on margins as Euro depreciation should help SMT margins. We have increased 2016 revenues by +9%, assuming at LED and Camera Module demand will sustain in 2016. We have also increased margins substantially as revenues increase sequentially.

This results in EPS increasing by +5% in 2015 and by +9% in 2016. We have increased our net income forecast by +2% for 2015 and +23% for 2016.

The forecast ROE in 2015 and 2016 are 19.5% and 19.7%.

Figure 5

CLSA forecast change

		FY15			FY16	
HK\$ m	New	Old	%Diff	New	Old	%Diff
Sales	13,488	14,786	-9%	14,979	13,724	9%
Gross profit	5,022	5,029	0%	5,396	4,619	17%
OP Profit	2,189	1,998	10%	2,400	1,806	33%
PBT	2,041	1,998	2%	2,230	1,806	23%
Net profit	1,674	1,639	2%	1,829	1,482	23%
Margins						
GM	37.2%	34.0%	322 bps	36.0%	33.7%	237 bps
OPM	16.2%	13.5%	272 bps	16.0%	13.2%	287 bps
PBT margin	15.1%	13.5%	163 bps	14.9%	13.2%	173 bps
Net margin	12.4%	11.1%	133 bps	12.2%	10.8%	142 bps

Source: CLSA

ASM Pacific the most expensive Semi stock in Hong Kong and Taiwan Despite these higher forecasts we cannot derive ROE above 20% in 2015 and 2016. Yet the stock is trading at 3.5x and 3.3x CLSA book value forecasts for 2015 and 2016, making ASM Pacific the most expensive Semi stock in Hong Kong and Taiwan, more richly valued than TSMC and Vanguard for example.

We maintain our Sell rating and base our fair value on $3.0x\ 2015CL$ book value or fair value of HK\$66.77.

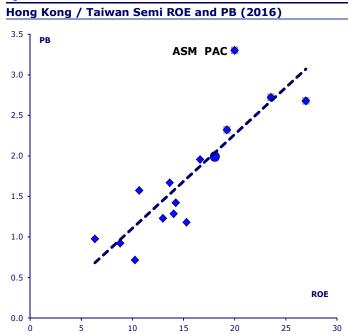


Figure 6

long k	(ong / Taiwan Sen	ni ROE and PB (20	16)
		ROE	PB
	ASM Pacific	20.0	3.3
	Vanguard	23.5	2.7
	TSMC	27.0	2.7
	SPIL	19.2	2.3
	ASE	18.1	2.0
	ChipMOS	16.6	2.0
	Chipbond	13.7	1.7
	Win Semi	10.7	1.6
	Amkor	14.3	1.4
	KYEC	14.0	1.3
	Powertech	13.0	1.2
	Ardentec	15.3	1.2
	SMIC	6.3	1.0
	UMC	8.8	0.9

10.3

Figure



Source: CLSA, Bloomberg

Hua Hong

Valuation details

0.7

We base valuations of all asset-heavy firms under our coverage, including semiconductor related firms, on PB versus ROE. We use the valuation identity (ROE-g)/(COE-g) with g=0 as we believe that 1) the very low growth rate of semi demand globally and 2) pricing and margins pressure do not warrant a positive perpetual growth rate. We use COE at 8.5% for all Hong Kong listed firms. We cross check the PB multiple with the PE identity (ROE-g)/(ROE*(COE-g)) and with a scatter plot of PB versus ROE of semiconductor firms oin the region. For ASM Pacific, we recognize that the firm has historically traded at premium valuations and use a higher PB multiple of 3.0x than the ROE profile warrants (2.3x to 2.6x).

Source: CLSA, Bloomberg

Investment risks

Macro risks: global demand slowdown for semiconductors and IT hardware in general. Company specific: ongoing migration of logic semiconductors from wirebonding to flip chip packages. Dependency on Capex from Chinese firms in the LED and Camera Module segments.





Summary financials

Year to 31 December	2012A	2013A	2014CL	2015CL	2016CL
Summary P&L forecast (HK\$	•				
Revenue	10,461	10,841	14,229	13,488	14,979
Op Ebitda	1,256	1,186	2,505	2,640	2,546
Op Ebit	868	764	2,119	2,189	2,400
Interest income	0	0	0	0	0
Interest expense	(9)	(19)	(121)	(148)	(169)
Other items	9	(73)	30	-	-
Profit before tax	869	673	2,028	2,041	2,230
Taxation	(180)	(114)	(429)	(367)	(401)
Minorities/Pref divs	-	-	-	-	-
Net profit	689	559	1,600	1,674	1,829
Summary cashflow forecast	(HK\$m)				
Operating profit	868	764	2,119	2,189	2,400
Operating adjustments	(179)	(206)	(519)	(516)	(571)
Depreciation/amortisation	388	422	385	451	147
Working capital changes	(698)	(487)	(778)	(560)	(340)
Net interest/taxes/other	98	430	384	` -	-
Net operating cashflow	476	924	1,591	1,565	1,636
Capital expenditure	(459)	(347)	(443)	(848)	(500)
Free cashflow	17	577	1,148	717	1,136
Acq/inv/disposals	(93)	(84)	161	-	-
Int, invt & associate div	` -	-	-	-	-
Net investing cashflow	(552)	(431)	(282)	(848)	(500)
Increase in loans	492	(104)	1,777	188	217
Dividends	(561)	(260)	(521)	(921)	(1,172)
Net equity raised/other	(10)	(43)	368	-	-
Net financing cashflow	(79)	(407)	1,624	(733)	(955)
Incr/(decr) in net cash	(155)	87	2,933	(16)	181
Exch rate movements	12	23	(1,936)	(318)	0
Opening cash	1,630	1,487	1,597	2,594	2,260
Closing cash	1,487	1,597	2,594	2,260	2,441
Summary balance sheet fore	ecast (HK\$m)				
Cash & equivalents	1,487	1,597	2,594	2,260	2,441
Debtors	3,155	3,116	4,120	4,442	4,512
Inventories	2,876	3,236	3,886	4,231	4,512
Other current assets	7	70	49	64	65
Fixed assets	2,106	2,001	2,073	2,788	3,142
Intangible assets	15	10	1,033	1,033	1,033
Other term assets	577	711	741	741	741
Total assets	10,224	10,740	14,496	15,559	16,447
Short-term debt	695	551	151	-	
Creditors	2,092	2,152	2,918	2,918	2,918
Other current liabs	565	601	689	810	824
Long-term debt/CBs	129	145	2,180	2,520	2,737
Provisions/other LT liabs	186	211	352	352	352
Minorities/other equity	0	0	0	0	0
Shareholder funds	6,557	7,081	8,205	8,958	9,616
Total liabs & equity	10,224	10,740	14,496	15,559	16,447
	·	•	•	•	•
Ratio analysis	(40.0)	2.6	24.2	(F.D)	
Revenue growth (% YoY)	(19.0)	3.6	31.3	(5.2)	11.1
Ebitda growth (% YoY)	(51.7)	(5.5)	111.1	5.4	(3.6)
Ebitda margin (%)	12.0	10.9	17.6	19.6	17.0
Net profit margin (%)	6.6	5.2	11.2	12.4	12.2
Dividend payout (%)	81.4	46.5	52.7	55.0	64.1
Effective tax rate (%)	20.7	17.0	21.1	18.0	18.0
Ebitda/net int exp (x)	143.1	63.9	20.8	17.8	15.0
Net debt/equity (%)	(10.1)	(12.7)	(3.2)	2.9	3.1
ROE (%)	10.7	8.2	20.9	19.5	19.7
ROIC (%) EVA®/IC (%)	12.3 3.8	10.3 1.8	23.0 14.5	20.3 11.8	20.0 11.5
			14.5	I I X	115

Source: CLSA



Companies mentioned

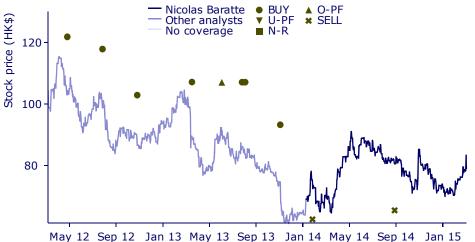
ASM Pacific (522 HK - HK\$79.00 - SELL)¹
ASE (2311 TT - NT\$43.7 - BUY)²
O-film (N-R)
Q Tech (1478 HK - HK\$1.89 - BUY)¹
Sanan (N-R)
SPIL (2325 TT - NT\$55.8 - BUY)²
Sunny Optical (2382 HK - HK\$12.52 - BUY)¹
trul (N-R)

Analyst certification

The analyst(s) of this report hereby certify that the views expressed in this research report accurately reflect my/our own personal views about the securities and/or the issuers and that no part of my/our compensation was, is, or will be directly or indirectly related to the specific recommendation or views contained in this research report.

Important disclosures





Date	Rec	Target	Date	Rec	Target
29 Aug 2014	SELL	65.47	03 Jun 2013	O-PF	107.20
26 Jan 2014	SELL	62.55	17 Mar 2013	BUY	107.27
03 Nov 2013	BUY	93.35	25 Oct 2012	BUY	103.00
03 Aug 2013	BUY	107.20	26 Jul 2012	BUY	118.00
03 Aug 2013	Droppe	ed Coverage	25 Apr 2012	BUY	122.00
26 Jul 2013	BUY	107.20			

Source: CLSA

The policy of CLSA (which for the purpose of this disclosure includes subsidiaries of CLSA B.V. and CLSA Americas, LLC ("CLSA Americas")) and Credit Agricole Securities Taiwan Co., Ltd. ("CA Taiwan") is to only publish research that is impartial, independent, clear, fair, and not misleading. Analysts may not receive compensation from the companies they cover.

Regulations or market practice of some

jurisdictions/markets prescribe certain disclosures to be made for certain actual, potential or perceived conflicts of interests relating to a research report as below. This research disclosure should be read in conjunction with the research disclaimer as set Out at www.clsa.com/disclaimer.html the and applicable regulation of the concerned market where the analyst is stationed and hence subject to. This research disclosure

¹ Covered by CLSA; ² Covered by CAST



is for your information only and does not constitute any recommendation, representation or warranty. Absence of a discloseable position should not be taken as endorsement on the validity or quality of the research report or recommendation.

Neither analysts nor their household members/associates may have a financial interest in, or be an officer, director or advisory board member of companies covered by the analyst unless disclosed herein. Unless specified otherwise, CLSA/CLSA Americas/CA Taiwan did not receive investment banking/non-investment banking income from, and did not manage/co-manage a public offering for, the listed company during the past 12 months, and it does not expect to receive investment banking compensation from the listed company within the coming three months. Unless mentioned otherwise, CLSA/CLSA Americas/CA Taiwan does not own a discloseable position, and does not make a market, in the securities.

The analysts included herein hereby certify that the views expressed in this research report accurately reflect their own personal views about the securities and/or the issuers and that unless disclosed otherwise, no part of their compensation was, is, or will be directly or indirectly related to the specific recommendation or views contained in this research report or revenue from investment banking services provided. The analyst/s also states/s and confirm/s that he has/have not been placed under any undue influence, intervention or pressure by any person/s in compiling this research report. In addition, the analysts included herein attest that they were not in possession of any material, nonpublic information regarding the subject company at the time of publication of the report. Save from the disclosure below (if any), the analyst(s) is/are not aware of any material conflict of interest.

Key to CLSA/CLSA Americas/CA Taiwan investment rankings: BUY: Total stock return (including dividends) expected to exceed 20%; O-PF: Total expected return below 20% but exceeding market return; U-PF: Total expected return positive but below market return; SELL: Total expected return to be negative. For relative performance, we benchmark the 12-month total forecast return (including dividends) for the stock against the 12month forecast return (including dividends) for the market on which the stock trades. For example, in the case of US stock, the recommendation is relative to the expected return for S&P of 10%. Exceptions may be made depending upon prevailing market conditions. We define as "Double Baggers" stocks we expect to yield 100% or more (including dividends) within three years. "High Conviction" Ideas are not necessarily stocks with the most upside/downside but those where the Research Head/Strategist believes there is the highest likelihood of positive/negative returns. The list for each market is

monitored weekly.

Overall rating distribution for CLSA/CLSA Americas/CA Taiwan Universe: Buy / Outperform - CLSA: 63%; CLSA Americas: 63%; CA Taiwan: 68%, Underperform / Sell -CLSA: 37%; CLSA Americas: 37%; CA Taiwan: 32%, Restricted - CLSA: 0%; CLSA Americas: 0%; CA Taiwan: 0%. Data as of 31 December 2014. Investment banking clients as a % of rating category: Buy / Outperform -CLSA: 2.6%; CLSA Americas: 0%; CA Taiwan: 0%, Underperform / Sell - CLSA: 1.6%; CLSA Americas: 0%; CA Taiwan: 0%, Restricted - CLSA: 0%; CLSA Americas: 0%; CA Taiwan: 0%. Data for 12-month period ending 31 December 2014. For a history of recommendations and price targets for companies mentioned in this report, as well as company specific disclosures, please write to: (a) CLSA Americas, Compliance Department, 1301 Avenue of the Americas, 15th Floor, New York, New York 10019-6022; (b) CLSA, Group Compliance, 18/F, One Pacific Place, 88 Queensway, Hong Kong and/or; (c) CA Taiwan Compliance (27/F, 95, Section 2 Dun Hua South Road, Taipei 10682, Taiwan, telephone (886) 2 2326 8188).

© 2015 CLSA Limited, CLSA Americas, LLC ("CLSA Americas") and/or Credit Agricole Securities Taiwan Co., Ltd. ("CA Taiwan")

This publication/communication is subject to and incorporates the terms and conditions of use set out on website. the www.clsa.com Neither the publication/communication nor any portion hereof may reprinted, sold, resold, copied, reproduced, distributed, redistributed, published, republished, displayed, posted or transmitted in any form or media or by any means without the written consent of CLSA group of companies (excluding CLSA Americas, LLC) ("CLSA"), CLSA Americas (a broker-dealer registered with the US Securities and Exchange Commission and an affiliate of CLSA) and/or CA Taiwan.

CLSA, CLSA Americas and CA Taiwan has/have produced this publication/communication for private circulation to professional, institutional and/or wholesale clients only. This publication/communication may not be distributed or redistributed to retail investors. The information, opinions and estimates herein are not directed at, or intended for distribution to or use by, any person or entity in any jurisdiction where doing so would be contrary to law or regulation or which would subject CLSA, CLSA Americas and/or CA Taiwan to any additional registration or licensing requirement within such jurisdiction. The information and statistical data herein have been obtained from sources we believe to be reliable. Such information has not been independently verified and we make no representation or warranty as to its accuracy, completeness or correctness. Any opinions or estimates herein reflect the judgment of CLSA, CLSA



Americas and/or CA Taiwan at the date of this publication/communication and are subject to change at any time without notice. Where any part of the information, opinions or estimates contained herein reflects the views and opinions of a sales person or a non-analyst, such views and opinions may correspond to the published view of CLSA, CLSA Americas and/or CA Taiwan. This is not a solicitation or any offer to buy or sell. This publication/communication is for information purposes only and does not constitute any recommendation, representation, warranty or guarantee of performance. Any price target given in the report may be projected from one or more valuation models and hence any price target may be subject to the inherent risk of the selected model as well as other external risk factors. This is not intended to provide professional, investment or any other type of advice recommendation and does not take into account the particular investment objectives, financial situation or needs of individual recipients. Before acting on any information in this publication/communication, you should consider whether it is suitable for your particular circumstances and, if appropriate, seek professional advice, including tax advice. CLSA, CLSA Americas and/or CA Taiwan do/does not accept any responsibility and cannot be held liable for any person's use of or reliance on the information and opinions contained herein. To the extent permitted by applicable securities laws and regulations, CLSA, CLSA Americas and/or CA Taiwan accept(s) no liability whatsoever for any direct or consequential loss arising from the use of this publication/communication or its contents. Where the publication does not contain ratings, the material should not be construed as research but is offered as factual commentary. It is not intended to, nor should it be used to form an investment opinion about the non-rated companies.

Subject to any applicable laws and regulations at any given time, CLSA, CLSA Americas, CA Taiwan, their respective affiliates or companies or individuals connected with CLSA/CLSA Americas/CA Taiwan may have used the information contained herein before publication and may have positions in, may from time to time purchase or sell or have a material interest in any of the securities mentioned or related securities, or may currently or in future have or have had a business or financial relationship with, or may provide or have provided investment banking, capital markets and/or other services to, the entities referred to herein, their advisors and/or any other connected parties. As a result, investors should be aware that CLSA, CLSA Americas, CA Taiwan and/or their respective affiliates or companies or such individuals may have one or more conflicts of interest.

Regulations or market practice of some

jurisdictions/markets prescribe certain disclosures to be made for certain actual, potential or perceived conflicts of interests relating to research reports. Details of the disclosable interest can be found in certain reports as required by the relevant rules and regulation and the full details are available http://www.clsa.com/member/research_disclosures/. Disclosures therein include the position of CLSA, CLSA Americas and CA Taiwan only and do not reflect those of CITIC Securities International Company Limited, Credit Agricole Corporate & Investment Bank and/or their respective affiliates. If investors have any difficulty accessing this website, please webadmin@clsa.com on +852 2600 8111. If you require disclosure information on previous dates, please contact compliance_hk@clsa.com.

This publication/communication is distributed for and on behalf of CLSA Limited (for research compiled by non-US and non-Taiwan analyst(s)), CLSA Americas (for research compiled by US analyst(s)) and/or CA Taiwan (for research compiled by Taiwan analyst(s)) in Australia by CLSA Australia Pty Ltd; in Hong Kong by CLSA Limited; in India by CLSA India Private Limited (formerly CLSA India Limited) (Address: 8/F, Dalamal House, Nariman Point, Mumbai 400021. Tel No: +91-22-66505050. Fax No: +91-22-22840271; U67120MH1994PLC083118; SEBI Registration INZ000001735 (Old SEBI Regn No: BSE Capital Market Segment: INB011499135; BSE F&O Seament: INF011499135: NSE Capital Market INB231499139; NSE F&O Segment: INF231499139); in Indonesia by PT CLSA Indonesia; in Japan by CLSA Securities Japan Co., Ltd; in Korea by CLSA Securities Korea Ltd; in Malaysia by CLSA Securities Malaysia Sdn Bhd; in the Philippines by CLSA Philippines Inc (a member of Philippine Stock Exchange and Securities Investors Protection Fund); in Thailand by CLSA Securities (Thailand) Limited; in Taiwan by CA Taiwan and in United Kingdom by CLSA (UK).

United States of America: Where any section of the research is compiled by US analyst(s), it is distributed by CLSA Americas. Where any section is compiled by non-US analyst(s), it is distributed into the United States by CLSA solely to persons who qualify as "Major US Institutional Investors" as defined in Rule 15a-6 under the Securities and Exchange Act of 1934 and who deal with CLSA Americas. However, the delivery of this research report to any person in the United States shall not be deemed a recommendation to effect any transactions in the securities discussed herein or an endorsement of any opinion expressed herein. Any recipient of this research in the United States wishing to effect a transaction in any security mentioned herein should do so by contacting CLSA Americas. Canada: The delivery of this research report to any person in Canada



shall not be deemed a recommendation to effect any transactions in the securities discussed herein or an endorsement of any opinion expressed herein. Any recipient of this research in Canada wishing to effect a transaction in any security mentioned herein should do so by contacting CLSA Americas.

United Kingdom: In the United Kingdom, this research is a marketing communication. It has not been prepared in accordance with the legal requirements designed to promote the independence of investment research, and is not subject to any prohibition on dealing ahead of the dissemination of investment research. The research is disseminated in the EU by CLSA (UK), which is authorised and regulated by the Financial Conduct Authority. This document is directed at persons having professional experience in matters relating to investments as defined in Article 19 of the FSMA 2000 (Financial Promotion) Order 2005. Any investment activity to which it relates is only available to such persons. If you do not have professional experience in matters relating investments you should not rely on this document. Where the research material is compiled by the UK analyst(s), it is produced and disseminated by CLSA (UK). For the purposes of the Financial Conduct Rules this research is prepared and intended as substantive research material.

Singapore: This publication/communication distributed for and on behalf of CLSA Limited (for research compiled by non-US and non-Taiwan analyst(s)), CLSA Americas (for research compiled by US analyst(s) and/or CA Taiwan (for research compiled by Taiwan analyst(s)) in Singapore through CLSA Singapore Pte Ltd solely to persons who qualify as Institutional, Accredited and Expert Investors only, as defined in s.4A(1) of the Securities and Futures Act. Pursuant to Paragraphs 33, 34, 35 and 36 of the Financial Advisers (Amendment) Regulations 2005 with regards to an Accredited Investor, Expert Investor or Overseas Investor, sections 25, 27 and 36 of the Financial Adviser Act shall not apply to CLSA Singapore Pte Ltd. Please contact CLSA Singapore Pte Ltd in connection with queries on the report. MCI (P) 094-11-2014

The analysts/contributors to this publication/communication may be employed by a Credit Agricole, CLSA or CITIC Securities company which is different from the entity that distributes the publication/communication in the respective jurisdictions.

MSCI-sourced information is the exclusive property of Morgan Stanley Capital International Inc (MSCI). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be reproduced, redisseminated or used to create any financial products, including any indices. This information is provided on an "as is" basis. The user assumes the entire risk of any use made of this information. MSCI, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind. MSCI, Morgan Stanley Capital International and the MSCI indexes are service marks of MSCI and its affiliates. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and Standard & Poor's. GICS is a service mark of MSCI and S&P and has been licensed for use by CLSA.

EVA® is a registered trademark of Stern, Stewart & Co. "CL" in charts and tables stands for CLSA/CLSA Americas/CA Taiwan estimates unless otherwise noted in the source.



Research subscriptions

To change your report distribution requirements, please contact your CLSA sales representative or email us at cib@clsa.com. You can also fine-tune your Research Alert email preferences at https://www.clsa.com/member/tools/email_alert/.