

# JOYY Inc. (YY US)

## 2H23E recovery in sight

JOYY's 1Q23 result was better-than-feared, with rev -6% YoY (4% above consensus) and bottom line at US\$50mn (155% above consensus). Given domestic biz adjustment, 2Q23E rev guidance missed 8%. We forecast rev -11% YoY/-9% QoQ in 2Q23E (in which Bigo -3% QoQ, largely in line), partly disrupted by Ramadan and competition in the Middle East. We suggest investors to move into 2H23E recovery, with Bigo's positive growth in Europe & North America and stabilization in the Middle East. Bigo's OPM would be relatively stable YoY in FY23E, with ROI-driven S&M. To factor in domestic business adjustment, we trim FY23-25E topline forecast by 6%-7%, but keep earnings barely changed. Our SOTP-based TP is US\$46. We think YY has limited downside risks from current level, supported by its margin improvement, low valuation and dividend plan & repurchase program. We expect Bigo recovery in 2H23E to help it re-rate.

- **Upbeat 1Q23 results while guidance soft on domestic biz adjustment.** Rev -6% YoY, 4%/3% above consensus/ our estimates, in which Bigo/All others -12.5%/+29.7% YoY. Non-GAAP NP recorded at US\$50mn (adj. NPM at 8.5%), 155% above consensus, mainly on disciplined S&M expenses. YY would step up its share repurchase, to reward shareholders support. 2Q23E rev guidance missed 8%, primary due to business adjustment from other segment. Excluding that, Bigo's trend should be intact.
- **Looking into 2H23E recovery after Ramadan.** Given Ramadan in Mar and Apr, Bigo rev in the Middle East and SEA might see some disruptions in 2Q23E. After that, Bigo momentum stabilized and gradually recovered. We expect Bigo rev declined 3% QoQ in 2Q23E (-9% YoY), with solid recovery in Europe & North America to offset soft Middle East mkt. Mgmt. emphasized on innovative local operations (e.g. "Big Star Search" event) and content development to boost user engagement and monetization of Bigo Live. After 2Q23E, we keep positive on Bigo Live to achieve positive QoQ growth. Likee would see sequential growth in terms of DAU and revenue in 2Q23E. For other segments, we forecast total other rev at RMB75mn in 2Q23E (-20% YoY), due to domestic business adjustment.
- **Bigo's full-year margin trend intact.** We expect non-GAAP OPM of Bigo at 12.8% in 2Q23E, while full-year OPM intact (forecasting stable YoY). Business adjustment of all other segment might lead to less profit of near US\$10mn per quarter, but would be offset by higher interest income. We expect adj. NPM of Group at 5.8%/7.0% in FY23/24E, with continuous cost discipline and narrowing loss of other segment.
- **Maintain BUY.** We keep FY23E-25E earnings barely unchanged, with SOTP-based TP at US\$46, by assigning 6x FY23E P/E to Bigo Live.

### Earnings Summary

(YE 31 Dec)	FY21A	FY22	FY23E	FY24E	FY25E
Revenue (US\$ mn)	2,619	2,412	2,316	2,384	2,468
YoY growth (%)	36.5	(7.9)	(4.0)	2.9	3.5
Net income (US\$ mn)	109	199	135	166	202
Adj. EPS (US\$)	1.4	2.8	1.9	2.3	2.8
YoY growth (%)	NA	83.0	(32.0)	22.8	21.7
Consensus EPS	NA	NA	1.8	2.3	2.8
P/E (x)	NA	9.8	14.3	11.7	9.7
P/S (x)	1.50	0.8	0.8	0.8	0.7
Yield (%)	7.0	7.0	7.0	6.0	6.0

Source: Company data, Bloomberg, CMBIGM estimates

### BUY (Maintain)

Target Price	US\$46.0
(Previous TP	US\$46.0)
Up/Downside	+70.0%
Current Price	US\$27.0

### China Internet Sector

**Sophie Huang**  
 (852) 3900 0889  
 sophiehuang@cmbi.com.hk

**Eason Xu**  
 (852) 3900 0849  
 easonxu@cmbi.com.hk

### Stock Data

Mkt Cap (US\$ mn)	2,000
Avg 3 mths t/o (US\$ mn)	16.82
52w High/Low (US\$)	42.84/21.38
Total Issued Shares (mn)	55

Source: Bloomberg

### Shareholding Structure

T Rowe Price Group	5.74%
BlackRock	4.39%
Vanguard	3.36%

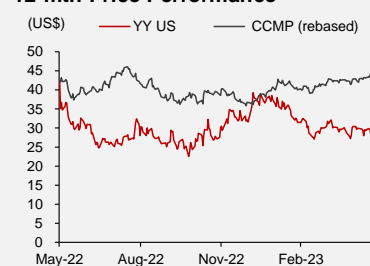
Source: Bloomberg

### Share Performance

	Absolute	Relative
1-mth	-7.3%	-12.6%
3-mth	-10.2%	-20.7%
6-mth	-5.7%	-20.2%

Source: Bloomberg

### 12-mth Price Performance



Source: Bloomberg

Auditor: PwC

**Figure 1: 1Q23 financial review**

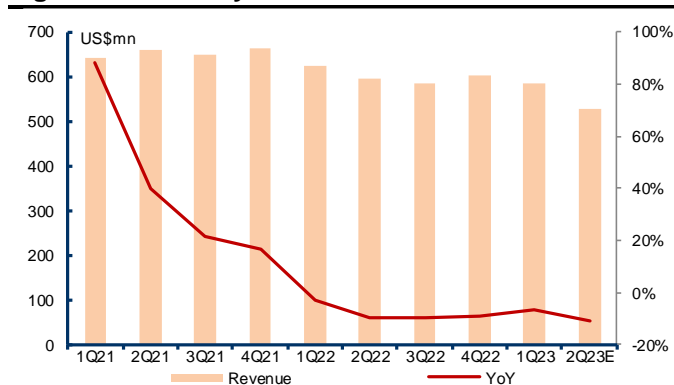
US\$ mn	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	QoQ	YoY	Consensus	Diff %
Revenue	662	651	664	624	596	587	605	584	-3.5%	-6.4%	563	4%
Gross profit	203	211	224	201	218	220	212	205	-3.6%	1.7%	192	7%
Operating profit	(101)	7	61	6	39	20	(14)	3	NA	NA	14	-82%
Adj. net profit	(4)	33	98	21	51	77	50	50	-0.9%	142.4%	20	155%
Adj. EPS (US\$)	(0.04)	0.36	1.35	0.28	0.71	0.94	0.49	0.62	NA	NA	0.31	99%
<b>Margin (%)</b>												
Gross margin	30.7%	32.4%	33.7%	32.2%	36.6%	37.5%	35.1%	35.1%			34.1%	
Operating margin	-15.3%	1.1%	9.1%	1.0%	6.5%	3.4%	-2.3%	0.4%			2.5%	
Adj. net margin	-0.5%	5.1%	14.7%	3.3%	8.6%	13.1%	8.3%	8.5%			3.5%	
<b>Growth (%)</b>												
Revenue (YoY)	39.7%	21.7%	16.8%	-3.0%	-9.9%	-9.8%	-8.9%	-6.4%			-9.8%	
Revenue (QoQ)	2.9%	-1.7%	2.0%	-6.0%	-4.4%	-1.6%	3.1%	-3.5%			-7.0%	
Operating profit	NA	NA	NA	NA	NA	NA	NA	NA			NA	
Adj. net profit	NA	NA	NA	NA	NA	131.5%	-48.4%	142.4%			NA	

Source: Company data, Bloomberg

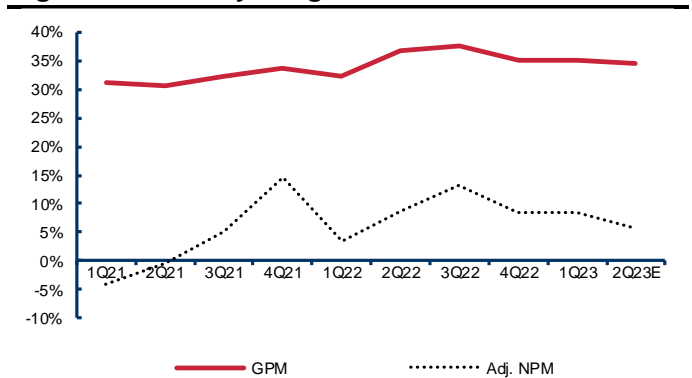
**Figure 2: Revenue breakdown**

US\$ mn	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	QoQ	YoY
<b>Total revenue</b>	<b>662</b>	<b>651</b>	<b>664</b>	<b>624</b>	<b>596</b>	<b>587</b>	<b>605</b>	<b>584</b>	<b>-3.5%</b>	<b>-6.4%</b>
<b>by segment</b>										
Live broadcasting	630	612	621	590	565	543	527	520	-1.3%	-11.8%
Others	32	38	43	34	31	44	77	63	-18.4%	87.7%
<b>by platform</b>										
Bigo	598	569	576	535	503	483	476	468	-1.8%	-12.5%
All other	64	82	88	89	93	103	128	116	-9.9%	29.7%

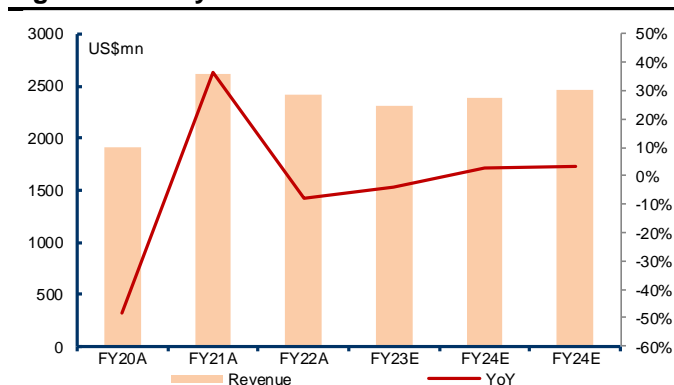
Source: Company data

**Figure 3: Quarterly rev estimates**

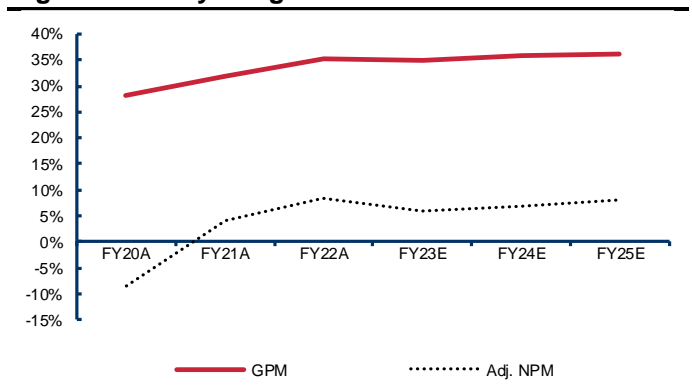
Source: Company data, CMBIGM estimates

**Figure 4: Quarterly margin estimates**

Source: Company data, CMBIGM estimates

**Figure 5: Yearly rev estimates**

Source: Company data, CMBIGM estimates

**Figure 6: Yearly margin estimates**

Source: Company data, CMBIGM estimates

We trimmed FY23E-25E topline 6%-7%, to reflect lower other segment rev with domestic business adjustment. But our earnings forecast was barely changed, given higher interest income to offset less profit from other segment.

Our SOTP-based TP was unchanged at US\$46. The TP was derived from: 1) YY Live: US\$1.9bn, based on proceeds from Baidu (for conservative estimates); 2) Huya: based on market cap; and 3) Bigo Live: US\$1.5bn, by assigning 6x FY23E P/E (multiple below industrial average for its slower growth and competition pressure).

**Figure 7: CMBIGM estimates vs consensus**

US\$ mn, Dec-YE	CMBIGM			Consensus			Diff (%)		
	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E
Revenue	2,316	2,384	2,468	2,457	2,653	2,840	-5.7%	-10.2%	-13.1%
Gross Profit	808	857	891	849	926	998	-4.9%	-7.5%	-10.7%
Operating Profit	111	148	177	65	112	151	69.1%	31.9%	16.9%
Net profit	135	166	202	141	186	225	-3.9%	-10.7%	-9.9%
Adj. EPS (RMB)	1.88	2.30	2.79	1.79	2.27	2.79	5.4%	1.6%	-0.1%
Gross Margin	34.9%	36.0%	36.1%	34.6%	34.9%	35.1%	+0.3ppts	+1.0ppts	+1.0ppts
Operating Margin	4.8%	6.2%	7.2%	2.7%	4.2%	5.3%	+2.1ppts	+2.0ppts	+1.8ppts
Net Margin	5.8%	7.0%	8.2%	5.7%	7.0%	7.9%	+0.1ppts	-0.0ppts	+0.3ppts

Source: CMBIGM estimates, Bloomberg

**Figure 8: Earnings revision**

US\$ mn, Dec-YE	New			Old			Diff (%)		
	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E
Revenue	2,316	2,384	2,468	2,461	2,551	2,654	-5.9%	-6.5%	-7.0%
Gross Profit	808	857	891	846	909	952	-4.5%	-5.7%	-6.3%
Operating Profit	111	148	177	138	168	205	-19.6%	-12.3%	-13.9%
Net profit	135	166	202	136	167	203	-0.4%	-0.1%	-0.4%
Adj. EPS (RMB)	1.88	2.30	2.79	1.89	2.30	2.80	-0.4%	-0.1%	-0.4%
Gross Margin	34.9%	36.0%	36.1%	34.4%	35.7%	35.8%	+0.5ppts	+0.3ppts	+0.3ppts
Operating Margin	4.8%	6.2%	7.2%	5.6%	6.6%	7.7%	-0.8ppts	-0.4ppts	-0.6ppts
Net Margin	5.8%	7.0%	8.2%	5.5%	6.5%	7.7%	+0.3ppts	+0.4ppts	+0.5ppts

Source: CMBIGM estimates

**Figure 9: SOTP valuation**

Figure 3: SOTP Valuation

SOTP		Metrics		Multiple	Shareholding	Valuation
(US\$ mn)	Rev	Adj. NP				Valuation
YY Live	Based on US\$1.9bn from Baidu (transaction valuation of US\$3.6bn)				100%	1,900
Huya	Based on mkt cap				18%	129
Bigo Live	FY23E	1,829	247	6x FY23E P/E	100%	1,481
<b>Total</b>						<b>3,511</b>
Net cash (less: US\$1.9bn received from Baidu)						1,190
Holding discount						30%
<b>Equity Value (US\$ mn)</b>						<b>3,290</b>
<b>Target Price (US\$)</b>						<b>46</b>

Source: Company data, CMBIGM estimates

**Figure 10: Valuation comps**

Company	Ticker	Mkt cap (USD mn)	Currency	Price	CMBI Rating	CMBI TP	PE			PS			FY23-25 EPS CAGR
							FY23E	FY24E	FY25E	FY23E	FY24E	FY25E	
<b>JOYY</b>	<b>YY US</b>	<b>1,908</b>	<b>USD</b>	<b>27</b>	<b>BUY</b>	<b>46</b>	<b>14.3</b>	<b>11.7</b>	<b>9.7</b>	<b>0.8</b>	<b>0.8</b>	<b>0.7</b>	<b>22%</b>
<b>Live Streaming</b>													
Hello Inc	MOMO US	1,535	USD	8	HOLD	14	5.4	5.0	4.7	0.9	0.8	0.8	6%
Inke	3700 HK	196	HKD	1	NA	NA	2.8	2.4	2.0	0.2	0.2	0.2	17%
Douyu	DOYU US	310	USD	1	NA	NA	NA	NA	56.6	0.4	0.4	0.4	445%
Huya	HUYA US	739	USD	3	BUY	7	NA	86.2	23.6	0.6	0.6	0.6	NA
Average							4.1	3.7	10.1	0.5	0.5	0.5	11%
<b>Pan-entertainment</b>													
TME	TME US	11,875	USD	7	BUY	11	13.4	12.5	11.4	2.8	2.6	2.4	9%
iQIYI	IQ US	4,045	USD	4	BUY	9	13.2	8.5	6.9	0.9	0.8	0.8	38%
China Literature	772 HK	3,798	HKD	29	NA	NA	17.0	15.0	13.2	3.2	2.9	2.7	12%
Bilibili	BILI US	6,881	USD	17	BUY	30	NA	NA	45.9	1.9	1.6	1.4	NA
Kuaishou	1024 HK	28,652	HKD	52	BUY	94	65.9	19.3	10.7	1.8	1.6	1.4	143%
Zhihu	ZH US	652	USD	1	BUY	2	NA	NA	14.1	1.0	0.8	0.7	NA
Average							14.6	13.8	11.3	1.9	1.7	1.6	20%
<b>Average</b>							<b>11.0</b>	<b>10.6</b>	<b>9.1</b>	<b>1.4</b>	<b>1.2</b>	<b>1.1</b>	<b>16%</b>

Source: Bloomberg, CMBIGM estimates

## Financial Summary

### Income statement

YE 31 Dec (US\$ mn)	FY21A	FY22A	FY23E	FY24E	FY25E
<b>Revenue</b>	2,619	2,412	2,316	2,384	2,468
Live broadcasting	2,477	2,226	2,085	2,058	2,064
Others	142	186	231	326	403
<b>COGS</b>	(1,781)	(1,559)	(1,615)	(1,641)	(1,703)
<b>Gross profit</b>	838	852	701	743	765
S&M	(280)	(262)	(280)	(287)	(296)
Admin. Exp.	(468)	(400)	(381)	(366)	(361)
R&D	(222)	(142)	(156)	(157)	(159)
Others	-	(15)	-	(0)	(0)
<b>Operating profit</b>	(107)	51	9	67	104
Financial income	91	93	131	125	132
Other income	25	18	19	(0)	(0)
<b>Pre-tax income</b>	(78)	635	122	153	189
Income tax	(26)	(35)	(34)	(34)	(35)
MI	14	27	-	-	-
Share of equity inv	(26)	(498)	-	-	-
Net profit	(90)	119	88	118	155
<b>Adj. net profit</b>	109	199	135	166	202

### Cash flow summary

YE 31 Dec (US\$ mn)	FY21A	FY22A	FY23E	FY24E	FY25E
<b>Net income</b>	(130)	102	88	118	155
D&A	88	105	121	135	148
Change in WC	(26)	(50)	14	(10)	(12)
Others	2,081	735	148	138	172
<b>Operating CF</b>	2,013	892	370	381	463
Capex	(158)	(163)	(168)	(173)	(178)
Associates	-	-	-	-	-
Others	(821)	(288)	(116)	(116)	(116)
<b>Investing CF</b>	(979)	(451)	(283)	(288)	(294)
Equity raised	-	-	-	-	-
Change of debts	-	-	-	-	-
Others	(724)	-	-	-	-
<b>Financing CF</b>	(724)	-	-	-	-
<b>Net change in cash</b>	312	441	87	93	169
Cash (beg of yr)	1,756	2,068	2,509	2,635	2,789
FX	-	-	-	-	-
<b>Cash (end of yr)</b>	2,068	2,509	2,635	2,789	2,960

### Balance sheet

YE 31 Dec (US\$ mn)	FY21A	FY22A	FY23E	FY24E	FY25E
<b>Non-current assets</b>	4,050	4,427	4,659	4,696	4,726
Fixed asset	365	343	575	613	642
Long-term investments	1,022	660	660	660	660
Intangible assets	312	398	398	398	398
Others	2,350	3,025	3,025	3,025	3,025
<b>Current assets</b>	5,070	4,645	5,721	5,888	6,074
Cash	2,134	1,518	2,635	2,789	2,960
Deposit over 3 months	1,604	2,361	2,361	2,361	2,361
Account receivable	114	118	113	117	121
Others	1,218	648	605	614	624
<b>Current liabilities</b>	2,512	3,072	3,065	3,048	3,065
Borrowings	-	-	-	-	-
Account payable	18	56	56	55	56
Tax payable	66	78	78	78	78
Accrued expenses	2,346	2,360	2,357	2,338	2,351
Other	82	578	574	577	580
<b>Non-current liabilities</b>	980	497	475	475	475
Convertible debt	924	401	401	401	401
Other long-term liabilities	56	96	74	74	74
MI	34	233	218	203	189
Total net assets	5,628	5,503	6,781	6,940	7,135
<b>Shareholders' equity</b>	5,594	5,270	6,066	6,239	6,447

### Key ratios

YE 31 Dec	FY21A	FY22A	FY23E	FY24E	FY25E
<b>Sales mix (%)</b>					
Live broadcasting	94.6	92.3	90.0	86.3	83.7
Others	5.4	7.7	10.0	13.7	16.3
<b>Total</b>	100.0	100.0	100.0	100.0	100.0
<b>Growth rate (%)</b>					
Revenue	36.5	(7.9)	(4.0)	2.9	3.5
Gross profit	55.2	1.7	(17.7)	5.9	3.0
EBIT	NA	NA	NA	653.7	55.6
Net profit	NA	83.0	(32.0)	22.8	21.7
<b>P&amp;L ratios (%)</b>					
Operating margin	(4.1)	2.1	0.4	2.8	4.2
Pre-tax margin	(3.0)	26.3	5.3	6.4	7.7
Adj. net margin	4.2	8.3	5.8	7.0	8.2
Effective tax rate	33.2	(5.4)	(28.1)	(22.5)	(18.3)
<b>Returns (%)</b>					
ROE	1.8	3.7	2.4	2.7	3.2
ROA	1.3	2.2	1.4	1.6	1.9
<b>Per share</b>					
EPS (RMB)	(1.1)	1.7	1.2	1.6	2.1
DPS (RMB)	0.0	0.0	0.0	0.0	0.0
BVPS (RMB)	71.6	73.2	84.3	86.3	88.7

Source: Company data, CMBIGM estimates

# 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 in this report.

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.

## CMBIGM Ratings

<b>BUY</b>	: Stock with potential return of over 15% over next 12 months
<b>HOLD</b>	: Stock with potential return of +15% to -10% over next 12 months
<b>SELL</b>	: Stock with potential loss of over 10% over next 12 months
<b>NOT RATED</b>	: Stock is not rated by CMBIGM
<b>OUTPERFORM</b>	: Industry expected to outperform the relevant broad market benchmark over next 12 months
<b>MARKET-PERFORM</b>	: Industry expected to perform in-line with the relevant broad market benchmark over next 12 months
<b>UNDERPERFORM</b>	: Industry expected to underperform the relevant broad market benchmark over next 12 months

## CMB International Global Markets Limited

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

**CMB International Global Markets Limited ("CMBIGM") 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. CMBIGM 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. CMBIGM 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 CMBIGM, solely for the purpose of supplying information to the clients of CMBIGM 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 CMBIGM 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. CMBIGM has exerted every effort in its capacity to ensure, but not to guarantee, their accuracy, completeness, timeliness or correctness. CMBIGM provides the information, advices and forecasts on an "AS IS" basis. The information and contents are subject to change without notice. CMBIGM 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. CMBIGM may make investment decisions or take proprietary positions that are inconsistent with the recommendations or views in this report.

CMBIGM 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 CMBIGM 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 CMBIGM may have a conflict of interest that could affect the objectivity of this report and CMBIGM 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 consent of CMBIGM.

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 CMBIGM.

For recipients of this document in the United States

CMBIGM is not a registered broker-dealer in the United States. As a result, CMBIGM is not subject to U.S. rules regarding the preparation of research reports and the independence of research analysts. The research analyst who is primary responsible for the content of this research report is not registered or qualified as a research analyst with the Financial Industry Regulatory Authority ("FINRA"). The analyst is not subject to applicable restrictions under FINRA Rules intended to ensure that the analyst is not affected by potential conflicts of interest that could bear upon the reliability of the research report. This report is intended for distribution in the United States solely to "major US institutional investors", as defined in Rule 15a-6 under the US, Securities Exchange Act of 1934, as amended, and may not be furnished to any other person in the United States. Each major US institutional investor that receives a copy of this report by its acceptance hereof represents and agrees that it shall not distribute or provide this report to any other person. Any U.S. recipient of this report wishing to effect any transaction to buy or sell securities based on the information provided in this report should do so only through a U.S.-registered broker-dealer.

For recipients of this document in Singapore

This report is distributed in Singapore by CMBI (Singapore) Pte. Limited (CMBIGMG) (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. CMBIGMG 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, CMBIGMG accepts legal responsibility for the contents of the report to such persons only to the extent required by law. Singapore recipients should contact CMBIGMG at +65 6350 4400 for matters arising from, or in connection with the report.