

CMGE Technology (302 HK)

Eyes on strong pipeline in FY23E

We suggest investors to look beyond CMGE's soft FY22 (rev -31% YoY) which is disrupted by licenses suspension. Looking into 2023E, we see high visibility for CMGE to regain momentum (forecasting rev +97% in FY23E), backed by 11 new titles to be launched (including two highly-anticipated titles: *Soul Land: Shrek College*, *Sword and Fairy: Wen Qing*). *Sword and Fair World* (仙劍世界), a self-developed metaverse platform to be launched in 2H23E, will bring further upside if it is executed well. We expect CMGE to benefit from game license normalization and AIGC tailwinds. We keep our financials unchanged, with DCF-based TP at HK\$3.52 (implying 14x/11x FY23/24E P/E).

- **Look beyond mixed FY22.** CMGE delivered mixed FY22 results, in which revenue -31% YoY, in line with our estimates. But adj. net profit came in at -RMB196mn, below our forecast of RMB70mn, mainly due to non-operating losses incurred by investees whose launches were postponed amid license suspension in 2022. However, we think the results could be forgivable as GPM lifted up to 41% (above our estimate of 39.6%), improving sequentially from 37.2% in FY21, despite the challenging macro and tightened regulatory environment. As the market has already well anticipated the softness, we suggest to look beyond FY22 and move into fruitful FY23/24E, backed by 1) loosening of regulation, 2) strong pipeline, 3) overseas expansion and 4) low base in FY22.
- **Reacceleration in sight with strong pipeline.** CMGE exceled itself with abundant valuable IP reserve and rich pipeline. We expect FY23/24E to regain momentum, with ~20 games in pipeline (6 licensed), including over five key titles (e.g. *Sword and Fairy: Wen Qing* (新仙劍之揮劍問情, to be launched in Jul 2023), *Soul Land: Shrek College* (斗羅大陸: 史萊克學院, Sep 2023), *Sword and Fair World* (仙劍世界)). Coupled with full-year contribution from two games launched in 2H22, we forecast its rev +97% YoY in FY23E, in which overseas games account for ~25% of rev (backed by 15 new games). CMGE plans to launch *Sword and Fairy World* in 2H23E. As an open world game + entertainment and social networking Metaverse platform, we expect it to attract more users and creators with vibrant content and AIGC initiatives.
- **Maintain BUY.** We keep our FY23-24E earnings unchanged, with DCF-based TP at HK\$3.52. The stock is trading at 8.6x FY23E P/E, an attractive valuation in our view. We expect its multiple to rerate, considering its abundant pipeline, strong earnings growth and low grossing concentration. Key catalysts: 1) *Sword and Fair World* PV in Apr; and 2) blockbuster games in 2H23E.

Earnings Summary

(YE 31 Dec)	FY21A	FY22A	FY23E	FY24E	FY25E
Revenue (RMB mn)	3,957	2,714	5,350	7,403	8,436
YoY change (%)	4%	-31%	97%	38%	14%
Adj. net income (RMB mn)	630	(196)	601	812	931
Adj. EPS (RMB)	0.27	(0.07)	0.22	0.29	0.34
YoY growth (%)	-22%	NA	NA	35%	15%
Consensus EPS (RMB)	NA	NA	0.23	0.31	0.30
P/E (x)	7.2	NA	9.0	6.7	5.8
P/S (x)	1.2	1.7	0.9	0.6	0.5
Yield (%)	3%	3%	3%	3%	3%
Net gearing (%)	Net cash	Net cash	Net cash	Net cash	Net cash

Source: Company data, Bloomberg, CMBIGM estimates

BUY (Maintain)

Target Price	HK\$3.52
(Previous TP)	HK\$3.52)
Up/Downside	+57.8%
Current Price	HK\$2.23

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 (HK\$ mn)	6,283
Avg 3 mths t/o (HK\$ mn)	28.58
52w High/Low (HK\$)	2.75/ 1.10
Total Issued Shares (mn)	2,768
Source: Bloomberg	

Shareholding Structure

Fairview Ridge Investment	25.1%
Pegasus Network	10.6%
Bilibili	7.2%
Source: Bloomberg	

Share Performance

	Absolute	Relative
1-mth	0.5%	2.0%
3-mth	42.0%	38.8%
6-mth	38.5%	23.9%

Source: Bloomberg

12-mth Price Performance



Source: Bloomberg

Auditor: Ernst & Young

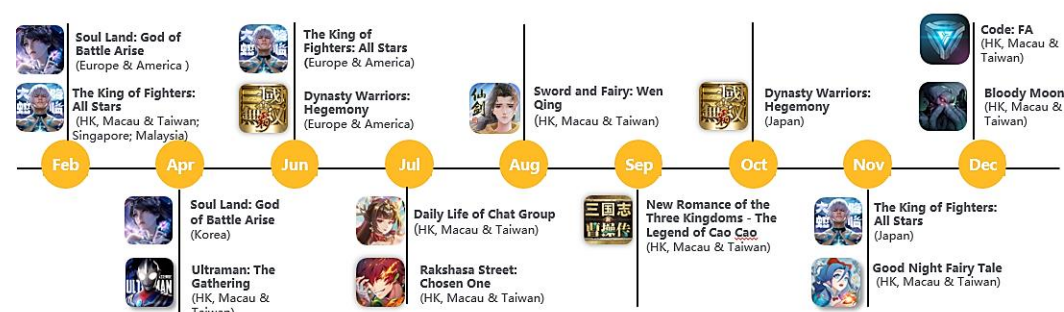
Figure 1: CMGE key game pipeline in 2023 & 2024

Title	Chinese title	License	Genre	(est.)Launch date	Detail
Sword and Fairy World	仙剑世界	N	PRG/Open world	3Q23	Self-developed
Sword and Fairy: Wen Qing	新仙剑之挥剑问情	Y	PRG/CCG	2Q23	
Soul Land · Shrek College	斗罗大陆:史莱克学院	N	MMORPG	3Q23	
Swallowed Star	吞噬星空	Y	Action/CCG	1Q23	
Cultivation Fantasy	我的御剑日记	Y	CCG	2Q23	
Basketball 3v3	街篮 3v3	Y	Sports	3Q23	Self-developed
World of Castellan	城主天下	Y	SLG	2Q23	Self-developed
Soul Land · reverse time and space	斗罗大陆:逆转时空	N	MMORPG	2024	
DreamWorks: All Stars	梦工厂全明星	N	ARPG	2024	
Battle Through the Heaven	斗破苍穹	N	ARPG	2024	
Disney: All Stars	迪士尼全明星	N	ARPG	2024	
Soul Land · Longyuan	斗罗大陆:龙渊	N	MMORPG	2024	

Source: Company data, CMBIGM

Figure 2: Pipeline of new games in 2023 (China)

Source: Company data, CMBIGM

Figure 3: Pipeline of new games in 2023 (overseas)

Source: Company data, CMBIGM

Figure 4: CMGE's FY22 review

RMB mn, Dec-YE	FY21	FY22	FY23E	FY24E	FY25E
Revenue	3,957	2,714	5,350	7,403	8,436
Game publishing	2,820	2,114	3,247	3,930	4,519
Game development	905	453	1,941	3,207	3,623
IP licensing	232	147	162	267	294
Overseas game	432	366	1,483	2,863	3,664
Domestic game	2,698	1,939	2,435	2,513	2,647
Cost of sales	(2,483)	(1,602)	(3,156)	(4,368)	(4,977)
Gross profit	1,473	1,112	2,193	3,035	3,459
Selling and distribution expenses	(498)	(238)	(545)	(755)	(860)
Administrative expenses	(446)	(731)	(893)	(1,255)	(1,434)
Other expenses	(31)	(193)	(34)	(38)	(34)
Operating profit	499	(50)	721	987	1,130
Other income and gains	237	64	-	-	-
Finance costs	(24)	(35)	(23)	(20)	(21)
Share of profits and losses of JV	(4)	(0)	(1)	(2)	(1)
Share of profits and losses of associates	(2)	(17)	(11)	(10)	(12)
Pre-tax profit	705	(38)	686	955	1,095
Tax	(57)	(41)	(86)	(143)	(164)
Profit for the period from continuing operations	648	(80)	601	812	931
Profit for the period from a discontinued operation	-	-	-	-	-
Profit for the period	594	(217)	601	812	931
MI	(18)	(12)	0	0	0
Net profit attributable to ordinary shareholders	612	(205)	601	812	931
Adj. net profit	630	(196)	601	812	931
Margin Analysis					
Gross margin	37%	41%	41%	41%	41%
Operating margin	13%	-2%	13%	13%	13%
Net margin	16%	-7%	11%	11%	11%
Growth Analysis					
Revenue	4%	-31%	97%	38%	14%
Gross profit	20%	-25%	97%	38%	14%
Operating profit	17%	NA	NA	37%	14%
Net profit	-22%	NA	NA	35%	15%

Source: Company data, CMBIGM estimates

Sword and Fairy World aims not only to be an online game but also a social platform to maintain core users base for games in the future. The mgmt expects to launch PVs on 20 April and 27 April, the first-round test in May or June, and finally game launch in 2H23E.

- **Top Chinoiserie IP with fruitful years to come.** *Sword and Fairy* is the top IP (with more than 100mn fans) in Chinoiserie. Mgmt believes 2023-2025 will be fruitful years for the IP, attributable to its multi-year development and efforts in this field. Hundreds of co-operation with the IP further underpin solid foundation for *Sword and Fairy World*.
- **Promising addressable market.** *Sword and Fairy World's* addressable market is promising, given it steps into the Chinoiserie market with a more trillion market size, in which *Sword and Fairy* games occupy RMB30bn-50bn. With sophisticated experiences in *Sword and Fairy* series games, *Sword and Fairy World* is capable of fulfilling users' demands with high-quality content, differentiating it from other *Sword and Fairy* games in the homogeneous market.
- **Well positioned in the open-world games.** Compared to major genres, such as ACG and martial arts, *Sword and Fairy* is well-positioned to capture the opportunity in the open-world games with its unique IP.

Figure 5: Introduction of Sword and Fairy World



Source: Company data, CMBIGM

Figure 6: Gameplay of Sword and Fairy World



Source: Company data, CMBIGM

Figure 7: CMBIGM estimates vs consensus

RMB mn, Dec-YE	CMBIGM			Consensus			Diff (%)		
	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E
Revenue	5,350	7,403	8,436	4,868	6,340	6,663	9.9%	16.8%	26.6%
Gross profit	2,193	3,035	3,459	1,955	2,540	2,614	12.2%	19.5%	32.3%
Operating profit	721	987	1,130	736	1,010	538	-2.0%	-2.3%	110.0%
Adj. net profit	601	812	931	566	836	833	6.1%	-2.8%	11.7%
Adj. EPS (RMB)	0.22	0.29	0.34	0.23	0.31	0.30	-6.8%	-6.1%	14.0%
Gross margin	41.0%	41.0%	41.0%	40.2%	40.1%	39.2%	+0.8ppts	+0.9ppts	+1.8ppts
Operating margin	13.5%	13.3%	13.4%	15.1%	15.9%	8.1%	-1.6ppts	-2.6ppts	+5.3ppts
Adj. net margin	11.2%	11.0%	11.0%	11.6%	13.2%	12.5%	-0.4ppts	-2.2ppts	-1.5ppts

Source: CMBIGM estimates, Bloomberg

Figure 8: Earnings revision

RMB mn, Dec-YE	New			Old			Diff (%)		
	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E
Revenue	5,350	7,403	8,436	5,350	7,403	NA	0.0%	0.0%	NA
Gross profit	2,193	3,035	3,459	2,193	3,035	NA	0.0%	0.0%	NA
Operating profit	721	987	1,130	721	987	NA	0.0%	0.0%	NA
Adj. net profit	601	812	931	601	812	NA	0.0%	0.0%	NA
EPS (RMB)	0.22	0.29	0.34	0.22	0.29	NA	0.0%	0.0%	NA
Gross margin	41.0%	41.0%	41.0%	41.0%	41.0%	NA	0.0ppts	0.0ppts	NA
Operating margin	13.5%	13.3%	13.4%	13.5%	13.3%	NA	0.0ppts	0.0ppts	NA
Net margin	11.2%	11.0%	11.0%	11.2%	11.0%	NA	0.0ppts	0.0ppts	NA

Source: Company data, CMBIGM estimates

Figure 9: DCF valuation

DCF Valuation (Rmb mn)								
	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
EBIT	709	975	1,116	1,331	1,548	1,762	1,970	2,168
Tax	(86)	(143)	(164)	(232)	(269)	(307)	(343)	(377)
D&A	40	37	39	41	43	45	47	50
Change in working capital	(513)	(680)	(340)	(347)	(354)	(361)	(368)	(375)
CAPEX	(30)	(30)	(30)	(32)	(33)	(35)	(36)	(38)
FCF	120	159	621	762	934	1,105	1,270	1,426
FCF Growth	33%	291%	23%	23%	23%	18%	15%	12%
PV	120	138	471	503	538	554	555	5,274
Terminal Value								12,441

Assumptions	
WACC	14.8%
Tax rate	-17.0%
Risk free rate	3.95%
Beta	1.2
Market risk return	13.0%
Cost of equity	14.8%
Long term growth	3.0%

Equity Value	
PV	8,153
minus: Net debt (Rmb mn)	(508)
minus: Minority interest (Rmb mn)	0
Equity Value(Rmb mn)	8,660
FX	0.89
Target Price (HK\$) based on DCF	3.52

		WACC					
Terminal growth rate	~	13%	14%	15%	16%	17%	
	1.5%	3.94	3.58	3.28	3.02	2.79	
	2.0%	4.06	3.67	3.35	3.08	2.84	
	2.5%	4.18	3.77	3.43	3.14	2.90	
	3.0%	4.32	3.88	3.52	3.21	2.95	
	3.5%	4.48	4.00	3.61	3.29	3.02	
		4.0%	4.65	4.13	3.72	3.37	3.08
		4.5%	4.84	4.28	3.83	3.46	3.16

Source: CMBIGM estimates, Bloomberg

Figure 10: Comps table

Company	Ticker	Mkt cap (USD mn)	Currency	Price	CMBI Rating	CMBI TP	PE			PS		
							FY23E	FY24E	FY25E	FY23E	FY24E	FY25E
CMGE	302 HK	786	HKD	2.23	BUY	3.52	9.0	6.7	5.8	0.9	0.6	0.5
Domestic Game												
Tencent	700 HK	457,834	HKD	376	BUY	450	22.5	19.0	16.2	5.1	4.6	4.1
NetEase	NTES US	55,939	USD	85	BUY	116	16.4	14.7	13.2	3.7	3.3	3.0
XD Inc	2400 HK	1,622	HKD	27	NA	NA	NA	NA	32.4	3.4	2.5	2.0
Kingssoft	3888 HK	5,953	HKD	34	NA	NA	62.7	38.6	29.7	4.5	3.8	3.2
IGG	799 HK	416	HKD	3	NA	NA	NA	66.1	11.2	0.7	0.6	0.6
FriendTimes	6820 HK	272	HKD	1	BUY	3	7.9	4.1	2.4	1.0	0.8	0.6
Archosaur Games	9990 HK	671	HKD	7	NA	NA	NA	NA	NA	5.9	3.2	0.5
Perfect World	002624 CH	4,620	CNY	16	BUY	49	20.4	17.8	15.0	4.1	3.4	3.0
Sanqi Interactive	002555 CH	8,609	CNY	26	BUY	30	20.0	17.3	15.3	3.6	3.1	2.7
Average							17.4	14.6	12.2	3.5	2.8	2.2
International Game												
Activision Blizzard	ATVI US	61,675	USD	79	NA	NA	20.1	18.5	16.9	6.6	6.4	5.9
Electronic Arts	EA US	31,032	USD	113	NA	NA	18.5	17.2	15.5	4.3	4.1	3.8
Take-Two	TTWO US	19,155	USD	114	NA	NA	33.3	21.4	14.7	3.6	3.1	2.5
ROBLOX	RBLX US	25,930	USD	43	NA	NA	NA	NA	NA	8.6	7.5	6.8
Nintendo	7974 JT	50,234	JPY	5,076	NA	NA	16.7	18.8	20.1	4.1	4.4	4.6
Bandai Namco	7832 JT	14,200	JPY	8,394	NA	NA	19.1	18.5	16.9	1.9	1.9	1.8
Square Enix	9684 JT	5,882	JPY	6,300	NA	NA	17.2	16.4	16.7	2.3	2.1	2.1
Z Holdings	4689 JT	22,238	JPY	382	NA	NA	15.9	29.8	24.0	1.7	1.6	1.5
CyberAgent	4751 JT	4,443	JPY	1,152	NA	NA	29.0	20.5	15.1	0.8	0.8	0.7
Sony	6758 JT	111,280	JPY	11,580	NA	NA	16.8	16.0	14.4	1.3	1.2	1.2
Capcom	9697 JT	9,575	JPY	4,715	NA	NA	35.0	31.6	28.2	10.3	9.3	8.5
Oriental Land	4661 JT	61,137	JPY	22,060	NA	NA	NA	82.9	62.1	17.3	14.5	12.1
Nexon	3659 JT	19,825	JPY	2,998	NA	NA	24.7	21.4	19.6	6.5	5.9	5.4
Average							22.4	19.8	18.4	5.3	4.8	4.4
Average							23.3	18.9	17.4	4.6	4.0	3.5

Source: Bloomberg, CMBIGM estimates

Financial Summary

Income statement

YE 31 Dec (RMB mn)	FY21A	FY22A	FY23E	FY24E	FY25E
Revenue	3,957	2,714	5,350	7,403	8,436
Game publishing	2,820	2,114	3,247	3,930	4,519
Game development	905	453	1,941	3,207	3,623
IP licensing	232	147	162	267	294
COGS	(2,483)	(1,602)	(3,156)	(4,368)	(4,977)
Gross profit	1,473	1,112	2,193	3,035	3,459
S&M	(498)	(238)	(545)	(755)	(860)
R&D	(446)	(731)	(893)	(1,255)	(1,434)
Other expenses	(31)	(193)	(34)	(38)	(34)
Operating profit	499	(50)	721	987	1,130
Other income	237	64	-	-	-
Finance costs	(24)	(35)	(23)	(20)	(21)
Associates	(7)	(17)	(12)	(12)	(13)
Pre-tax Income	705	(38)	686	955	1,095
Income Tax	(57)	(41)	(86)	(143)	(164)
MI	(18)	(12)	-	-	-
Net profit	612	(205)	601	812	931
Adj. net profit	630	(196)	601	812	931

Cash flow summary

YE 31 Dec (RMB mn)	FY21A	FY22A	FY23E	FY24E	FY25E
Pre-tax Income	651	(175)	686	955	1,095
D&A	132	25	40	37	39
Change in WC	(339)	(263)	(513)	(680)	(340)
Others	(88)	411	(72)	(130)	(150)
Operating CF	356	(2)	141	183	595
Capex	(305)	(300)	(30)	(30)	(30)
Others	(690)	124	-	-	-
Investing CF	(995)	(177)	(30)	(30)	(30)
Equity raised	702	-	-	-	-
Others	(651)	(588)	271	73	606
Financing CF	51	(588)	271	73	606
Net change in cash	51	(588)	271	73	606
Cash (beg of yr)	795	819	237	508	581
FX	(27)	7	-	-	-
Cash (end of yr)	819	237	508	581	1,186

Balance sheet

YE 31 Dec (RMB mn)	FY21A	FY22A	FY23E	FY24E	FY25E
Non-current assets	4,517	4,923	5,071	5,460	5,699
Fixed asset	9	18	4	0	42
Goodwill	1,108	1,125	1,023	1,023	1,023
Intangible assets	537	539	692	688	687
Others	3,457	3,821	4,130	4,580	4,799
Current assets	3,325	2,231	2,992	3,930	4,972
Cash	819	237	508	581	1,186
Trade receivables	1,052	1,071	1,444	1,999	2,278
Other current assets	1,454	923	1,040	1,351	1,508
Current liabilities	1,788	1,359	1,329	1,435	1,571
Bank loans	765	444	604	524	564
Trade and other payables	867	590	568	754	850
Tax payable	135	133	133	133	133
Other current liabilities	21	192	23	23	23
Non-current liabilities	260	103	75	75	75
Deferred tax liabilities	73	75	75	75	75
Contingent consideration	178	-	-	-	-
Others	8	27	-	-	-
Total Equity	5,794	5,692	6,658	7,880	9,025

Source: Company data, CMBIGM estimates

Key ratios

YE 31 Dec	FY21A	FY22A	FY23E	FY24E	FY25E
Sales mix (%)					
Game publishing	71.3	77.9	60.7	53.1	53.6
Game development	22.9	16.7	36.3	43.3	43.0
IP licensing	5.9	5.4	3.0	3.6	3.5
Total	100.0	100.0	100.0	100.0	100.0
Growth rate (%)					
Revenue	3.6	(31.4)	97.1	38.4	14.0
Gross profit	20.5	(24.6)	97.3	38.4	14.0
EBIT	16.7	NA	NA	36.9	14.5
Net profit	(21.9)	NA	NA	35.2	14.6
P&L ratios (%)					
Gross Margin	37.2	41.0	41.0	41.0	41.0
Pre-tax margin	17.8	(1.4)	12.8	12.9	13.0
Adj. net margin	15.9	(7.2)	11.2	11.0	11.0
Effective tax rate	(8.8)	23.6	(12.5)	(15.0)	(15.0)
Returns (%)					
ROE	11.2	(3.8)	9.7	11.2	11.0
ROA	8.4	(2.9)	7.9	9.3	9.3

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 or its affiliate(s) have investment banking relationship with the issuers covered in this report in preceding 12 months.

CMBIGM Ratings

BUY	: 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	: Stock with potential loss of over 10% over next 12 months
NOT RATED	: Stock is not rated by CMBIGM

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 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 (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.