

CMGE Technology (302 HK)

Bearing fruit from more titles in 2H23E

After recent price correction on weak market sentiment, we view it as a good entry point to accumulate CMGE, for: 1) solid performance of new titles launched in 2Q23E; 2) more highly-anticipated titles to come, including Sword and Fairy: Wen Qing (新仙剑之揮劍問情, 9 Jun), Hoop city 3v3 (licensed/Aug 2023), Soul Land: Shrek College (斗罗大陆, Oct 2023), Sword and Fair World (仙劍世界, Dec 2023); and 3) strong growth of 1H23E results. We believe CMGE is relatively defensive to macro uncertainty, and would benefit from AIGC initiatives on both UGC content and efficiency. We keep our financials unchanged, with DCF-based TP at HK\$3.52 (implying 14x/11x FY23/24E P/E).

- Bearing fruit from new titles launches.** We keep bullish on CMGE's rev reacceleration in FY23E, and see high visibility for it to continuously leverage well-known IPs to derive abundant adapted games. CMGE starts bearing fruit from new titles launched in 1H23E, including Swallowed Star <吞噬星空> (Apr 7) and Cultivation Fantasy <我的御劍日記> (18 May). Cultivation Fantasy, an incremental CCG game, achieved grossing of RMB50mn in the first week. We estimate its first-month grossing at RMB95mn (TOP40-50 in iOS grossing rank). Coupled with full-year contribution of two hits launched in 2H22, we forecast 1H23E rev +52% YoY.
- More titles to come in Jun & 2H23E.** Looking ahead, we expect its strong pipeline in Jun and 2H23E to continuously boost momentum. Sword and Fairy: Wen Qing, one of its key titles, would be launched on 9 Jun. We forecast its first-month grossing at RMB200mn, backed by its widely-popular IP, high-quality Chinese-style drawings and multiple-form gameplay. Sword and Fair World will enter into its first-time public test on 17 Jun, as another short-term catalyst. In 2H23E, we expect three key titles to bring further upside, including Hoop city 3v3 (licensed/Aug 2023), Soul Land: Shrek College (Oct 2023), Sword and Fair World (Dec 2023).
- AIGC initiatives to enhance user experience and efficiency.** CMGE has cooperated with partners to engage more AIGC initiatives, including NPC features, art designing, etc. We expect AIGC to enhance user experience with rich UGC content and intelligent NPC, but also to reduce R&D costs in the long run (by 15%-20% in staff, by 30%-50% in art outsourcing).
- Maintain BUY.** The stock is trading at 8.4x 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.

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	0.21	0.26	0.33
P/E (x)	6.7	NA	8.4	6.2	5.4
P/S (x)	1.1	1.6	0.8	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	+74.3%
Current Price	HK\$2.02

China Internet Sector

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Stock Data

Mkt Cap (HK\$ mn)	5,505
Avg 3 mths t/o (HK\$ mn)	26.24
52w High/Low (HK\$)	2.75/ 1.10
Total Issued Shares (mn)	2,753
Source: Bloomberg	

Shareholding Structure

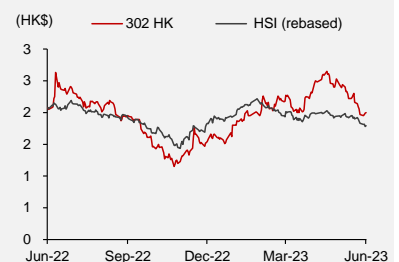
Fairview Ridge Investment	25.2%
Pegasus Network	10.7%
Bilibili	7.2%
Source: Bloomberg	

Share Performance

	Absolute	Relative
1-mth	-21.3%	-14.2%
3-mth	-8.7%	-0.9%
6-mth	30.1%	32.7%

Source: Bloomberg

12-mth Price Performance



Source: Bloomberg

Auditor: Ernst & Young

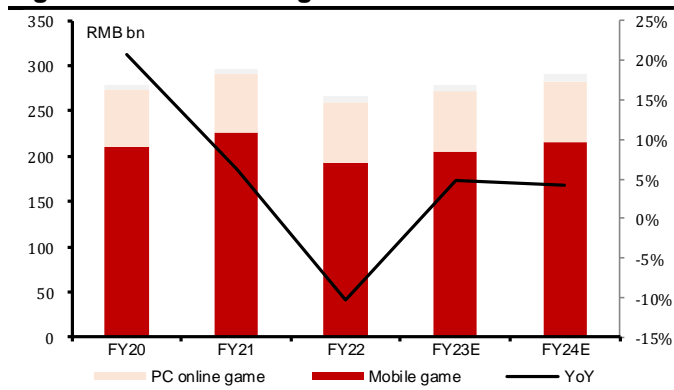
Riding on sector structural recovery

Sector to resume growth in sight

According to CNG data, China's game revenue declined 2% YoY in Apr, narrowing from -15% YoY in 1Q23. By segment, PC game +13% YoY (+7% YoY in 1Q23) and mobile game -4% YoY (vs. -19% YoY in 1Q23). Mobile game recovery was mainly driven by strong performance of new titles (e.g. Tencent's Metal Slug: Awakening <合金弹头: 觉醒> at TOP3-25, miHoYo's Honkai: Star Rail <崩坏: 星穹铁道> at TOP2-10 in iOS grossing rank) and resilient existing key titles (e.g. NetEase's Egg Party <蛋仔派对>). For overseas market, overseas revenue generated by Chinese publishers declined 14% YoY in Apr, slightly narrowing from -15% YoY in 1Q23.

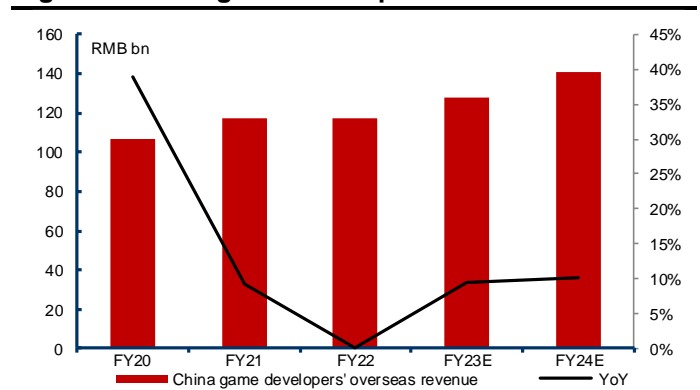
We expect game sector to resume growth in sight, boosted by 1) rising license approvals; 2) abundant high-quality pipeline in Jun and 2H23E; and 3) low base in FY22. We forecast game sector to grow 7% YoY in FY23E, and reiterate our preference on online games for its steady competition landscape, healthy cash flow and resilience to macro, compared to ads, ecommerce and other pan-entertainment sub-sectors.

Figure 1: China online game mkt size forecast



Source: GPC, CMBIGM estimates

Figure 2: China game developers' overseas revenue

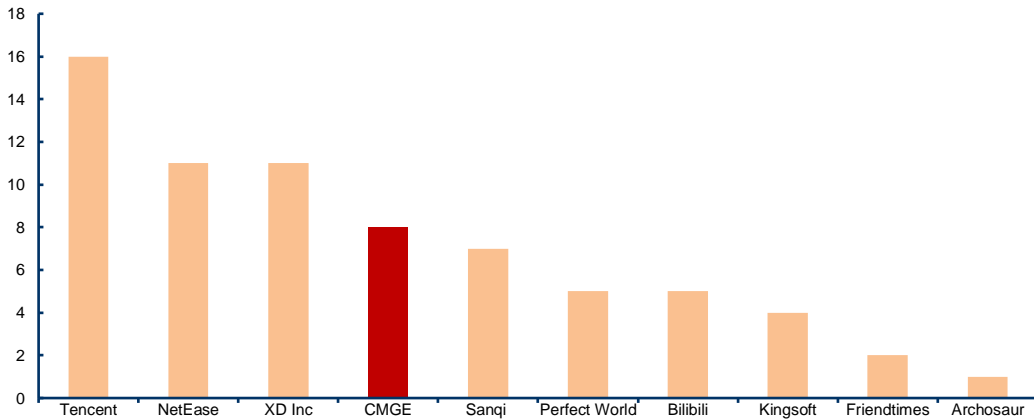


Source: GPC, CMBIGM estimates

Game approvals to normalize, and no. of games approved per month gradually increased

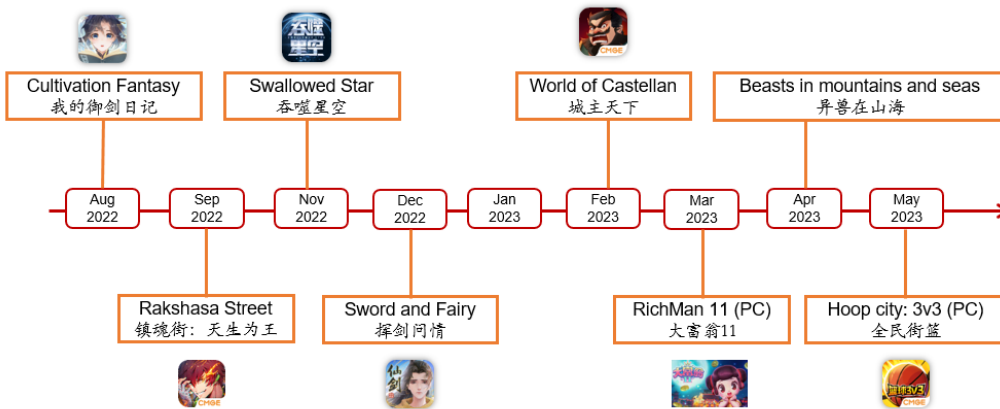
After resumption of game approvals from Apr 2022, the approval process returns to normal, in which no. of game approved per month gradually increased MoM (but still below 2021 level). By platform, CMGE has obtained eight game licenses after resumption, compared to Tencent/ NetEase/ Bili/ Kingsoft/ Sanqi Interactive/ Perfect World/ Archosaur/ XD/ FriendTimes of 16/11/5/4/7/5/1/11/2. In 2023, there are 480 game licenses YTD. We expect rising licenses and games to be released would help this sector to rerate. CMGE, as an IP-oriented game publisher pioneer, excelled itself with rich pipeline and strong license reserve (~20 games in FY23E).

Figure 3: Game licenses obtained after resumption



Source: SAPPRFT, CMBIGM

Figure 4: Licenses approval of CMGE games after resumption



Source: SAPPRFT, CMBIGM

Eyes on key titles in Jun and 2H23E

Tencent and NetEase present their rich game products reserve (40-50) during recent conferences. Their key titles in Jun and 2H23E include: 1) Tencent: Alchemy Stars <白夜极光>, The Division 2 <全境封锁 2>, Valorant <无畏契约>, Lost Ark <失落的方舟>; 2) NetEase: Badlanders <超凡先锋>, Racing Master <巅峰急速>, Justice Mobile <逆水寒>, Harry Potter International <哈利波特海外>. CMGE's no. of key titles in Jun and 2H23E (4 titles) is similar to TOP2 players, and richer than tier-2 comps. For tier-2 comps, key titles in Jun and 2H23E include: 1) Kingsoft: Containment Zone <尘白禁区>, The Other Shore <彼岸>; 2) Bilibili: Pretty Derby <赛马娘>; 3) XD: Sword of Convallaria <铃兰之剑>; 4) Sanqi: Ba Ye <霸业>, Fuyao Yimeng <扶摇一梦>, The Dragon and Alice <龙与爱丽丝>; 5) Perfect World: Forsaken World 2 <神魔大陆 2>, Zhuxian World <诛仙世界>; and 6) FriendTimes: Twist of the Fate <浮生忆玲珑>.

A solid start with key titles launches

Start bearing fruit from new titles

CMGE released three titles from Jan to May 2023, including Ultraman: The Gathering <奥特曼: 集结> (Jan 13), Swallowed Star <吞噬星空> (Apr 7) and Cultivation Fantasy <我的御剑日记> (May 18). Three titles' grossing trended well YTD, and highly-anticipated Cultivation Fantasy might generate monthly grossing of RMB95mn in its first month after launch, in our view. Coupled with full-year contribution from *The King of Fighter: All stars* <全明星激斗> and *Rakshasa Street: Chosen One* <镇魂街: 天生为王>, both of which were launched in 2H22, we forecast its 1H23E rev to grow at 52% YoY, showing a solid start.

- **Ultraman: The Gathering <奥特曼: 集结> (launched on 13 Jan).** The game is adapted from the IP of the original Ultraman series produced and licensed by Tsuburaya Productions Co., Ltd. in Japan. It has been in development for almost two years and was reserved by over 1mn users within one month of open reservation. We estimate its monthly grossing stable at RMB25mn in 1H23E, in which Android channel was the key contributor.
- **Swallowed Star <吞噬星空> (launched on 7 Apr).** It is an action CCG game based on the platinum work/ novel of China Literature and the leading IP of Tencent Video and Animation. The novel "Swallowed Star" reveals a vast and mysterious future world. The second season of the game was highly acclaimed, with nearly 2bn viewers, and was made into an annual series. After its launch, we forecast its grossing at RMB40mn in its first month, and would contribute 5% of total rev in FY23E, coupled with overseas version.
- **Cultivation Fantasy <我的御剑日记> (launched on 18 May).** Cultivation Fantasy is an incremental CCG game developed by famous game producer Cheng Liangqi and his team from Love Games (Shanghai) Internet Technology (乐府互娱), one of CMGE's invested R&D companies. Before its launch, its pre-registered players surpassed 2mn. On the day of its launch, it ranked Top1 in TapTap hot list. The official Douyin live broadcast attracted 30,000 users engaged (at the same time), with 7.5mn "like". In its first week after launch, CF has consistently ranked top 3 in the hot list of TapTap, with a score of 7.6. It achieved grossing of RMB50mn in its first week after launch, per mgmt. We think the game's initial popularity was mainly attributable to younger generation targeting, CCG+ Coatar features and free & smooth exploration. As it ranked TOP40-50 in iOS grossing rank, we see high visibility for CF to achieve first-month grossing at around RMB95mn. Revenue contribution of Cultivation Fantasy might be low due to net rev recognition, but the ROI and profitability would be decent.

Figure 5: Swallowed Star launched on 7 Apr



Swallowed Star

- The game is adapted from a novel named Swallowed Star written by a platinum writer whose ID is "I Eat Tomatoes". It is jointly published by CMGE and Yuewen Group.
- The novel "Swallowed Star" reveals a vast and mysterious future world. The second season of the game was highly acclaimed, with nearly 2 billion viewers, and was made into an annual series.
- The game has been launched on 7 Apr 2023.



Source: Company data, CMBIGM

Figure 6: Cultivation Fantasy launched on 18 May



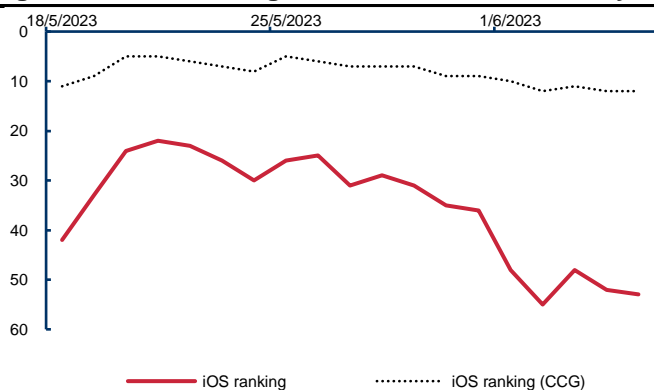
Cultivation Fantasy

- The game is an incremental CCG game developed by famous game producer Cheng Liangqi and his team from Love Games (Shanghai) Internet Technology (乐府互娱), our invested R&D company.
- The game has been launched on 18 May 2023.



Source: Company data, CMBIGM

Figure 7: iOS Grossing rank of Cultivation Fantasy



Source: Qimai data

More titles to come in 2H23E

Four highly-anticipated titles to boost 2H23E momentum

Looking ahead, we expect its strong pipeline in Jun and 2H23E to continuously boost momentum. Sword and Fairy: Wen Qing <新仙剑之挥剑问情>, one of its key titles, would be launched on 9 Jun. We forecast its first-month grossing at RMB200mn (similar to The New Legend of The Condor Heroes <新射雕群侠传之铁血丹心>), backed by its widely-popular IP, high-quality Chinese-style drawings and multiple-form gameplay. On top of that, Sword and Fair World <仙剑世界> will enter into its first testing on 17 Jun, as another short-term catalyst. In 2H23E, we expect three key titles to bring further upside, including Hoop city 3v3 <全民街篮, licensed/Aug 2023>, Soul Land: Shrek College <斗罗大陆: 史莱克学院, Oct 2023>, Sword and Fair World <仙剑世界, Dec 2023>.

- **Sword and Fairy: Wen Qing <新仙剑之挥剑问情> (licensed; to be launched on 9 Jun).** It is a RPG incremental CCG game under The Legend of Sword and Fairy IP. The elegant Chinese-style drawings of the game perfectly reappear the original and classic characters of Legend of Sword and Fairy series game in HD quality. With the gameplay of strategic combat and character development of three forms, players can enjoy and unlock combat formation at will. With nostalgic maze puzzle elements and hidden items, the game will provide users with immersive gaming experience. The game has obtained its license and planned to be launched on 9 Jun 2023. We forecast its first-month grossing at RMB200mn (similar to The New Legend of The Condor Heroes <新射雕群侠传之铁血丹心>), contributing 13% of total rev in FY23E (for domestic & overseas versions).
- **World of Castellan <城主天下> (licensed; to be launched in Jun).** It is a self-developed SLG game under the theme of New Romance of the Three Kingdoms, developed by the Group's wholly-owned subsidiary, Wenmai Hudong (文脉互动). The game has obtained its license and planned to be launched in Jun 2023, and it will be jointly published by CMGE and Sanqi Interactive Entertainment. We forecast its annual revenue at RMB150mn in FY23E, with both domestic & overseas versions.
- **Hoop city 3v3 <全民街篮> (licensed; to be launched in Aug 2023).** CMGE has captured the development opportunity in building a strong sporting nation. Hoop city 3v3, the cross-PC, console mobile-end game under development by CMGE's subsidiary Shanghai Zhoujing, will be the core on which to construct a "Street Basketball eSport Ecosystem". The game has obtained its license and expected to be launched in Aug 2023. We estimate it to contribute revenue of RMB200mn in FY23E, with domestic version.
- **Soul Land: Shrek College <斗罗大陆: 史莱克学院> (not yet licensed; to be launched in Oct 2023).** It is a high-quality team-fight MMORPG game under Soul Land, the leading IP of China Literature, developed by Shanghai Lingren (上海灵刃). As one of the key titles, we expect it to generate revenue of RMB550mn/RMB313mn in FY23/24E, accounting for 10%/4% of total revenue.

Figure 8: 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	4Q23	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	4Q23	
Hoop city 3v3	全民街篮	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 9: Sword and Fairy: Wen Qing (挥剑问情)



- A RPG incremental CCG game under The Legend of Sword and Fairy IP. The elegant Chinese-style drawings of the game perfectly reappear the original and classic characters of Legend of Sword and Fairy series game in HD quality. With the gameplay of strategic combat and character development of three forms, players can enjoy and unlock combat formation at will. With nostalgic maze puzzle elements and hidden items, the game will provide users with immersive gaming experience.
- The game has obtained its license and planned to be launched on 9 Jun 2023.

Sword and Fairy: Wen Qing



Source: Company data, CMBIGM

Figure 10: Hoop city 3v3 (全民街篮)



- The Group has captured the development opportunity in building a strong sporting nation. Hoop City 3v3, the cross-PC, console mobile-end game under development by the Group's subsidiary Shanghai Zhoujing, will be the core on which to construct a "Street Basketball eSport Ecosystem".
- The game has obtained its license and expected to be launched in Aug 2023.



Source: Company data, CMBIGM

Figure 11: Soul Land: Shrek College (斗罗大陆)



- A high quality team fight MMORPG game under Soul Land, the leading IP of China Literature Limited, developed by Shanghai Lingren (上海灵刃).
- The game is expected to be launched in Oct 2023

Soul Land: Shrek Academy



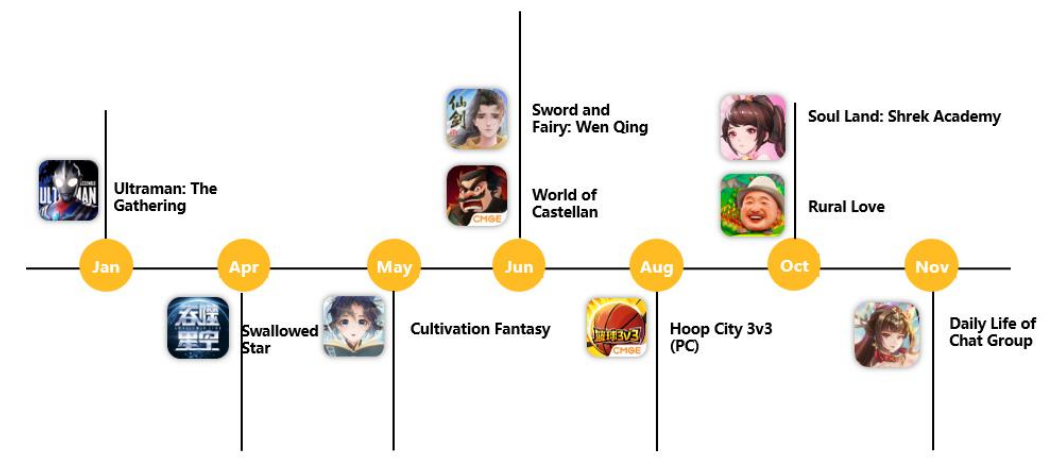
Source: Company data, CMBIGM

Figure 12: Sword and Fair World (仙剑世界)



Source: Company data, CMBIGM

Figure 13: Pipeline of new games in 2023 (China)



Source: Company data, CMBIGM

Sword and Fairy to unlock open world + Metaverse TAM

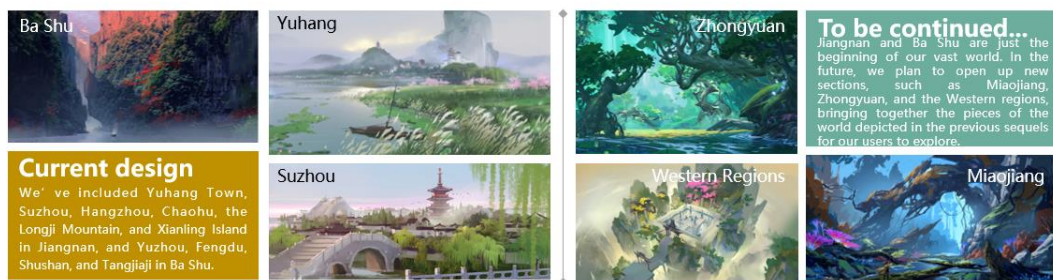
We expect *Sword and Fairy World* to be launched in 2H23E, and to contribute annual grossing of >RMB1bn. *Sword and Fairy World*, as an open world + metaverse game with the theme of Chinese style Sword and Fairy, excels itself with well-known IP, unconventional adventures in a real-life setting, unconstrained creativity and highly "immersive" game experience. It launched game trailer /gameplay video on 20 April and 27 April, and will launch its first-round test in Jun 2023.

- Top Chinoiserie IP with huge core fans base.** Sword and Fairy is the top IP in Chinoiserie, with more than 100mn core fans (600mn+ user base) and high proportion of youth. We expect this valuable IP to support *Sword and Fairy World* with effective user expansion after launch. 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 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 and unconstrained creativity, differentiating it from other *Sword and Fairy* games in the homogeneous market. It is a brand-new story based on the series, with more than 100 renowned IP characters.
- 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.

Users in *Sword and Fairy World* will have greater freedom and opportunities for real-life experiences in the open-world setting, with an expansion of the metaverse. Under conservative estimate, we expect its open world setting to generate revenue in the early stage (as mature game type), while it would take some time to see monetization from metaverse.

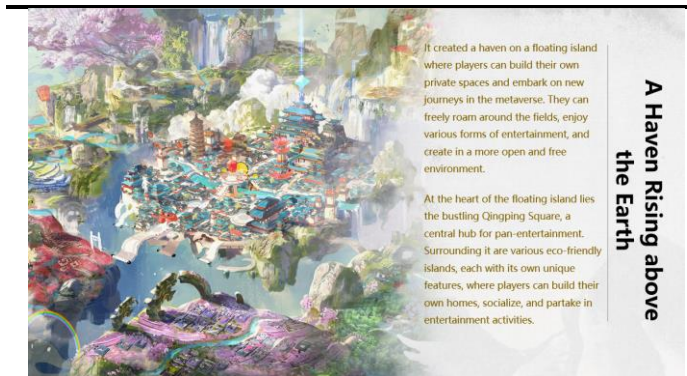
- **Open world.** As an open world with free and smooth exploration, *Sword and Fairy World* provides with unconventional adventures in a real-life setting and immersive experience backed by high-quality animation. In the game, every creature possesses a spiritual essence, with brand-new storyline. Users can enjoy free and unfettered battle experience with sword, mastering tactics, and Taoism.
- **Metaverse.** *Sword and Fairy World* aimed to build a “home” exclusively for players, with laid-back life, unconstrained creativity, entertainment and socializing (e.g. party game, Chinese-style disco and virtual werewolf), and digital consumption (e.g. merchant economy).

Figure 14: Sword and Fairy World enriched by profound Chinese culture



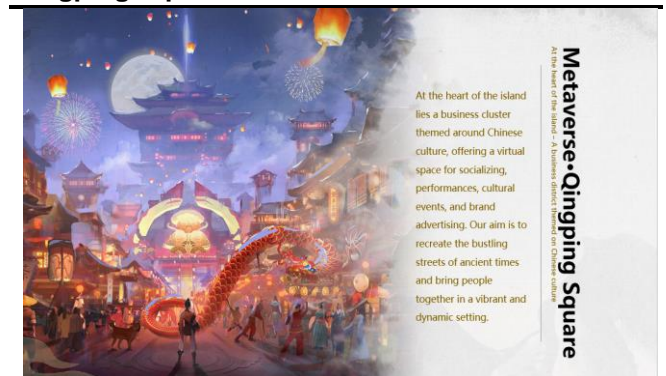
Source: Company data, CMBIGM

Figure 15: Sword and Fairy World: A Haven Rising above the Earth



Source: Company data, CMBIGM

Figure 16: Sword and Fairy World: Metaverse-Qingping Square

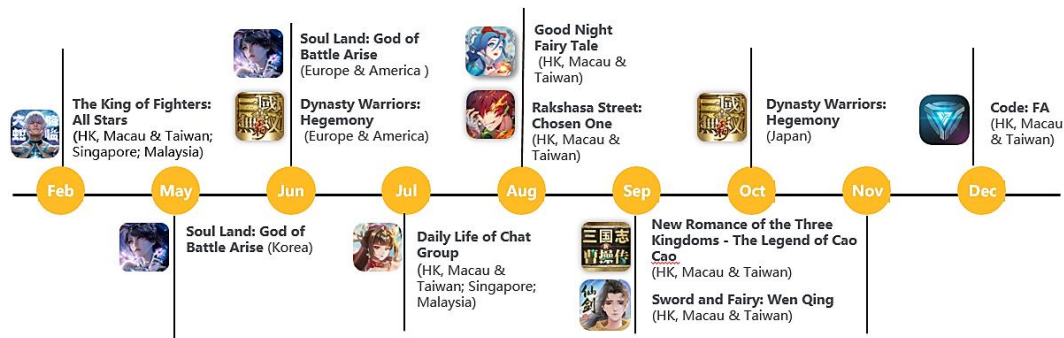


Source: Company data, CMBIGM

Stepping up overseas market expansion backed by 11 new titles

We expect CMGE's overseas expansion (mainly in Southeast Asian countries) to accelerate and account for ~25% of revenue in FY23E (vs.13% in FY22), supported by abundant overseas pipeline of 11 new titles. We forecast overseas rev to achieve triple-digit YoY growth in FY23E (vs. low base in FY22), in which overseas versions of Sword and Fairy: Wen Qing <新仙剑之挥剑问情> and The King of Fighter: All stars <全明星激斗> are estimated to contribute 45% of total overseas rev (with annual grossing of RMB253mn/198mn).

Figure 17: Pipeline of new games in 2023 (overseas)



Source: Company data, CMBIGM

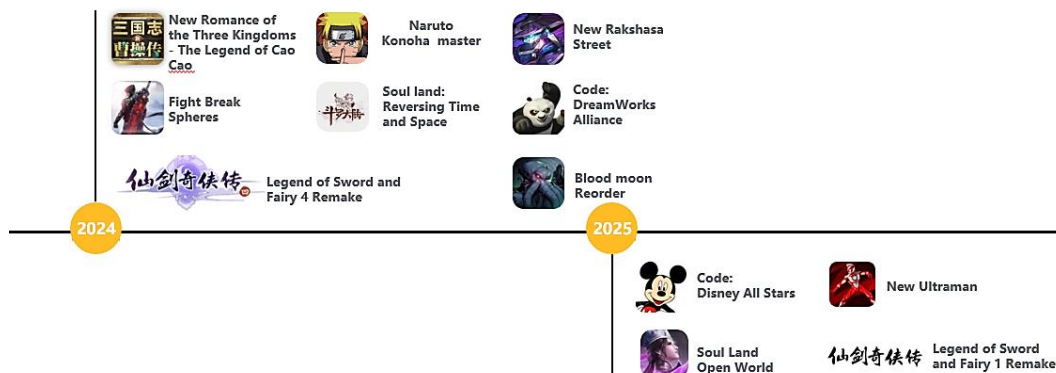
Influential Game IP reserve and CP investment to support ongoing pipeline in 2024-2025

CMGE holds the largest reserve of 123 IPs (55 licensed IPs & 68 proprietary IPs) in China, supported by deep cooperation with IP owners and IP investment. We expect CMGE to leverage its existing well-known IPs to derive abundant adapted games, and attract loyal game players with longer life cycle (e.g. One Piece - the Road of the Strong <海贼王>, Fighter of Destiny <择天记>, Legend of Sword and Fairy <仙剑奇侠传>). Such abundant IP reserve would support its strong pipeline of 10-20 new titles per year, in our view.

- Well poised to tap the potential of existing IP reserve.** The majority of CMGE's existing IPs have already built up stable and extensive fan base, and the games adapted from a few popular IPs, such as The Legend of Sword and Fairy (仙剑), have gained tractions with multiple versions (e.g. Legend of Sword and Fairy 7 (Console game) in 2022, Sword and Fairy: Wen Qing in 2023E, Legend of Sword and Fairy 4 Remake in 2024E). In view of the popularity of the IPs mentioned above, we are bullish on the monetization performance of those adapted games.
- Proven record of investment to incubate well-known IPs.** By investing in excellent IP content platforms and IP production enterprises as a limited partner of China Prosperity Capital ("CPC"), CMGE seeks to gain access to quality IPs and strong relationship with IP owners and content providers. According to the public information on CPC's website, CPC has invested in over 20 IP content platforms and IP production companies, including Kidstone, 36Kr, etc. We expect CMGE to proceed with investment in IP fields to realize strategic synergies and build IP-oriented game ecosystem.

- **Consecutive investment on well-known game developers.** Apart from popularity of IP, we view that the game quality is equally significant to an IP-game’s success. CMGE directly invested in >10 game developers to supplement game pipeline. We expect the cooperation with diverse CPs would support GMGE’s high productivity, to further optimize game development efficiency.

Figure 18: Pipeline of new games in 2024-2025



Source: Company data, CMBIGM

AIGC initiatives to enhance user experience and improve efficiency

In order to capture upcoming opportunities in AI, CMGE actively cooperates with tech companies such as Microsoft, Baidu, Huawei, and Bytedance in LLM (large language model) and AIGC. For example, CMGE cooperated with Microsoft to adopt its algorithm by subscription (less than RMB10mn expense per year). With AI technology, CMGE will enhance user experience with smart AI NPC and provide UGC Creation Tool in games (e.g. Sword and Fairy World).

- **Smart AI NPC.** Non-playable characters (NPCs), guided by behavior trees generated by AI algorithms, can adapt to different settings and take corresponding actions. For example, they fetch the washing in when it rains and express discomfort when getting hit, which makes the game more interactive and realistic.
- **UGC Creation Tool.** With the help of a sophisticated UGC editor, players can more freely design different levels and plots in the open world and alter items and appearances in the metaverse. Players can make PartyGame maps using the editor as well. The integration of AIGC tools further simplifies the UGC creation process.
- **High-definition modelling and multi-dimensional face and appearance customization.** Players can customize the main character through high-precision modelling using lifelike character skins and clothing textures. They can also create the face by inputting various parameters rather than doing it manually.

Apart from that, CMGE will improve profitability with optimized cost and efficient operation, attributable to AI applications. We estimate around 20-30% of productivity can be improved under AI, which shortens the time spent in design, marketing, and promotion. On top of that, we expect CMGE to save 30%-50% of outsourcing expenses and 10-20% of R&D expenses in the mid-term. We think AI will empower CGME in the near future with more applications in gameplay and operation.

For AIGC regulation, we believe healthy regulation environment would promote secular industrial development. CMGE would focus on security and controllability in content production, and ensure adherence to guidelines and mechanism under AIGC regulations.

Financial Analysis

Forecasting 26% rev CAGR in FY23-25E

We forecast CMGE's revenue to grow at 26% CAGR in FY23-25E, in which game publishing business still devotes the majority of total revenue. The robust growth is mainly driven by: 1) full-year contribution from two games launched in 2H22; 2) strong pipeline in 2023E (five highly-anticipated titles); 3) overseas expansion with >10 new titles. Furthermore, we expect Sword and Fair World (仙劍世界) and AIGC initiatives to bring further upside in the long run.

Enriching revenue mix with more self-developed titles

CMGE possessed game development capability through M&A in May 2018. Thanks to CMGE's adequate IP reserve and synergy with its mature game publishing business, we expect game development revenue to grow at 37% CAGR in FY23-25E, with revenue mix up to 43% in FY24E, backed by more self-developed titles.

Figure 19: CMGE's financial forecasts

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

Margin to slightly recover

We expect adj. NPM to improve to 11% in FY23/24E from -7% in FY22, backed by revenue mix shift towards self-developed games, and overseas expansion (lower channels charge). We expect gross margin at 41% in FY23-25E. R&D expenses and S&M expenses ratio would be relatively stable even with new launches. In the long run, AIGC initiatives would boost better margin outlook.

As such, we forecast CMGE to deliver 24% earnings CAGR during FY23-25E, mainly driven by topline growth. Adj. net profit will recover to RMB601mn/RMB812mn/RMB931mn in FY23/24/25E, respectively, in our estimates.

Healthy balance sheet with net cash position in FY23-25E

According to our estimates, CMGE will have strong operating cash inflow in supporting CAPEX in the next three years. Therefore, we believe CMGE can stay in net cash position in FY23-25E. We expect CMGE to hold RMB508mn/RMB581mn cash and cash equivalent as of 31 Dec of 2023E and 2024E.

According to our estimates, we forecast its FY23/24/25E CAPEX will be RMB30mn/RMB30mn/RMB30mn respectively, mainly for capitalization of exclusive agreement with third-party game developers and IP acquisition. Dividend payout is factored in our model at the moment.

Figure 20: CMGE's cash flow forecasts

RMB mn, Dec-YE	FY21	FY22	FY23E	FY24E	FY25E
Non-current assets	4,492	4,882	5,071	5,460	5,699
Property and equipment	9	18	4	0	42
Goodwill	1,108	1,125	1,023	1,023	1,023
Other intangible assets	537	539	692	688	687
Investments in a joint venture	5	5	5	5	5
Investments in associates	231	157	157	157	157
Financial assets at fair value through profit or loss	1,897	2,099	2,099	2,099	2,099
Deferred tax assets	58	58	58	58	58
Prepayments	648	881	1,033	1,430	1,629
Current assets	2,823	2,230	2,992	3,930	4,972
Trade receivables	1,052	1,071	1,444	1,999	2,278
Prepayments, deposits and other receivables	941	910	1,027	1,339	1,495
Due from related parties	11	12	12	12	12
Cash and cash equivalents	819	237	508	581	1,186
Current liabilities	1,788	1,190	1,329	1,435	1,571
Trade payables	378	308	500	686	781
Other payables and accruals	489	283	69	69	69
Interest-bearing bank borrowings	765	444	604	524	564
Tax payable	135	133	133	133	133
Due to related parties	4	7	7	7	7
Lease liabilities	17	15	16	16	16
Non-current liabilities	260	103	75	75	75
Deferred tax liabilities	73	75	75	75	75
Contingent consideration for business combination	178	0	0	0	0
Others	8	27	0	0	0
Total equity	5,794	5,692	6,658	7,880	9,025

Source: Company data, CMBIGM estimates

Strong operating cash flow

CMGE recorded net operating cash inflow of RMB611mn and RMB356mn in FY20 and FY21. With strong pipeline to be released, we expect CMGE to record operating cash flow of RMB141mn/ RMB183mn/ RMB595mn in FY23/24/25E. The slip in FY22 is mainly attributable to soft games grossing with game license suspension.

Figure 21: CMGE's cash flow forecasts

RMB mn, Dec-YE	FY21	FY22	FY23E	FY24E	FY25E
Cash Flow					
Profit before taxation	651	(175)	686	955	1,095
Depreciation and amortization	132	25	40	37	(10)
Change in working capital	(339)	(263)	(513)	(680)	(340)
Others	(88)	411	(72)	(130)	(150)
Operating cash flow	356	(2)	141	183	595
Investing cash flow					
CAPEX	(305)	(300)	(30)	(30)	(30)
Others	(690)	124	0	0	0
Investing cash flow	(995)	(177)	(30)	(30)	(30)
Financing cash flow					
Proceeds from share issuance	702	-	-	-	-
Others	(651)	(588)	271	73	606
Financing cash flow	51	(588)	271	73	606
Cash at period end	819	237	508	581	1,186
Working Capital Turnover					
Inventory days	NA	NA	NA	NA	NA
Trade receivables days	89	143	86	85	93
Trade payables days	48	78	47	50	54
Cash conversion cycle	42	65	39	36	40

Source: Company data, CMBIGM estimates

Maintain BUY with TP unchanged at HK\$3.52

Investment Thesis

We keep FY23-25E financials barely changed, and maintain BUY with unchanged DCF-based TP of **HK\$3.52** (implying 14x/11x FY23/24E P/E). We keep bullish on CMGE's revenue reacceleration in FY23E, and see high visibility for CMGE to continuously leverage its existing well-known IPs to derive abundant adapted games. CMGE's positive price drivers and catalysts would originate from: 1) potential solid 1H23E result; 2) *Sword and Fairy: Wen Qing* to be launched and *Sword and Fair World* first testing in Jun; 3) three blockbuster games to be launched in 2H23E; and 4) AIGC initiatives contribution.

The stock rebounded by 27% in a month after our initiation, and then corrected due to weak market sentiment. Currently it is trading at 8.4x/6.2x FY23/24E P/E, with attractive valuation. We expect upcoming titles launch and sector sentiment recovery would help its multiple to rerate, considering its abundant pipeline, strong earnings growth and low grossing concentration.

Valuation and peers comparison

Assuming a WACC of 14.8% and a terminal growth rate of 3.0%, our TP is HK\$3.52, representing 14x/11x FY23/24E P/E. Our DCF-based FY23E P/E for CMGE is not demanding, as it is in line with SMID-caps, and 26%/42% discount to China peers/global peers.

As for crosscheck, we pick 25 comparable peers, with 12/13 Chinese/overseas game companies, respectively. Domestic game peers are trading at 18.8x/15.4x FY23/24E P/E on average, while global peers are trading at 24.0x/19.5x FY23/24E P/E. We view higher multiple of global peers is mainly attributable to difference in macro and regulation environment, despite higher earnings growth for domestic peers. With game license resumption and rising grossing to deliver in 2H23E and 2024E, we think domestic games would see opportunity to re-rate in the long run.

For CMGE, our DCF-based FY23E P/E for CMGE is 26% discount to China peers, 13%/30% to NetEase/ Tencent, mainly on low liquidity and game quality. As an IP-oriented game pioneer, we think CMGE deserves in-line or higher multiple vs. SMID-caps, for 1) abundant IP reserve to build high barrier and support ongoing strong pipeline; 2) higher earnings growth potential and visibility; and 3) low grossing concentration.

- **Concentrated market in China, but SMID-caps still stand a chance.** China's mobile game market is relatively concentrated and stable, with Top 2 players accounting for 77% market share in 2022. However, we think there are always opportunities for SMID-caps, as: 1) game competition is relatively stable and rational; 2) still ample room for unique game types, e.g. ACG, female-related games; 3) AI tends to lower entry barrier for SMID-caps as well as trial-and-error cost to encourage innovation in both content and gameplay.
- **Enjoying edge in rich IPs and game genres.** Compared to major peers, CMGE stands out with its rich IPs (incl. The Legend of Sword and Fairy, RichMan and Xuan-Yuan Sword) and abundant games in pipeline. In addition, CMGE enjoys high gamer penetration which facilitates its user acquisition in a cost-effective manner, as its major games are IP-based MMORPGs and CCGs.
- **Outpacing peers with higher topline and earnings growth.** We believe CMGE is on a fast growth trajectory in FY23-25E with 26% rev CAGR, backed by strong

pipeline, as compared to its peers. In particular, CMGE's ability to apply for license approval has been witnessed, as it has received eight licenses in the past nine months since Aug 2022.

- **Margin recovery attributable to rev mix shift.** CMGE's margin is lower than peers, due to the high rev proportion of game publishing business (lower margin), along with manageable opex. However, we expect adj. NPM to improve to 11% in FY23-25E from -7% in FY22, attributable to rev mix shift towards self-developed games and overseas expansion (lower channels charge).

Figure 22: 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	4,880	6,474	8,074	9.6%	14.4%	4.5%
Gross profit	2,193	3,035	3,459	1,921	2,578	3,129	14.2%	17.7%	10.5%
Operating profit	721	987	1,130	658	879	1,086	9.6%	12.3%	4.1%
Adj. net profit	601	812	931	593	774	932	1.3%	4.9%	-0.1%
Adj. EPS (RMB)	0.22	0.29	0.34	0.21	0.26	0.33	3.3%	11.6%	0.7%
Gross margin	41.0%	41.0%	41.0%	39.4%	39.8%	38.8%	+1.6ppts	+1.2ppts	+2.2ppts
Operating margin	13.5%	13.3%	13.4%	13.5%	13.6%	13.4%	-0.0ppts	-0.2ppts	-0.1ppts
Adj. net margin	11.2%	11.0%	11.0%	12.1%	12.0%	11.5%	-0.9ppts	-1.0ppts	-0.5ppts

Source: CMBIGM estimates, Bloomberg

Figure 23: 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%	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%

		WACC					
		~	13%	14%	15%	16%	17%
Terminal growth rate	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	

Equity Value	
PV	8,153
minus: Net debt (Rmb mn)	(508)
minus: Minority interest (Rmb mn)	0
Equity Value (Rmb mn)	8,660
FX	0.9
Target Price (HK\$) based on DCF	3.52

Source: CMBIGM estimates, Bloomberg

Figure 24: Comps table

Company	Ticker	Mkt cap (USD mn)	Currency	Price	CMBI Rating	CMBI TP	PE			PS			FY23-25 EPS CAGR
							FY23E	FY24E	FY25E	FY23E	FY24E	FY25E	CAGR
CMGE	302 HK	717	HKD	2	BUY	3.5	8.5	6.5	5.4	1.0	0.8	0.6	26%
Domestic Game													
Tencent	700 HK	413,765	HKD	338	BUY	455	19.9	16.8	14.9	4.7	4.2	3.8	16%
NetEase	NTES US	55,859	USD	87	BUY	123	15.7	14.4	13.0	3.8	3.4	3.1	9%
XD Inc	2400 HK	1,312	HKD	21	NA	NA	NA	25.7	14.5	2.1	1.7	1.4	155%
Kingsoft	3888 HK	5,356	HKD	31	NA	NA	49.6	29.4	23.9	4.2	3.5	3.0	47%
IGG	799 HK	706	HKD	5	NA	NA	NA	7.3	5.0	1.0	0.9	0.9	NA
FriendTimes	6820 HK	281	HKD	1	BUY	1	9.8	5.1	3.7	1.1	0.9	0.8	62%
Archosaur Games	9990 HK	415	HKD	4	NA	NA	96.2	13.7	8.6	2.0	1.6	1.9	NA
Perfect World	002624 CH	5,178	CNY	19	BUY	49	22.4	19.0	16.8	4.1	3.6	3.2	15%
Sanqi Interactive	002555 CH	10,166	CNY	33	BUY	30	21.3	18.7	16.6	3.8	3.3	3.0	14%
Giant Network	002558 CH	5,689	CNY	20	NA	NA	29.0	24.4	20.2	12.1	10.2	9.3	20%
G-bits	603444 CH	5,536	CNY	547	NA	NA	24.2	20.7	18.3	6.8	5.9	5.2	15%
Kingnet Network	002517 CH	5,597	CNY	19	NA	NA	28.3	22.6	18.7	8.2	6.8	5.8	23%
Average							18.8	15.4	14.5	3.8	3.3	2.9	16%
International Game													
Activision Blizzard	ATVI US	63,286	USD	81	NA	NA	20.0	18.9	18.4	6.7	6.5	6.2	7%
Electronic Arts	EA US	34,817	USD	128	NA	NA	18.7	17.1	16.1	4.6	4.3	4.0	11%
Take-Two	TTWO US	23,287	USD	138	NA	NA	42.0	17.5	16.0	4.2	2.9	2.8	64%
ROBLOX	RBLX US	24,635	USD	40	NA	NA	NA	NA	NA	7.6	6.5	5.8	NA
Nintendo	7974 JT	56,340	JPY	6,083	NA	NA	22.1	23.8	26.1	5.2	5.5	5.7	-9%
Bandai Namco	7832 JT	16,244	JPY	3,420	NA	NA	23.0	20.7	18.5	2.2	2.1	2.0	12%
Square Enix	9684 JT	5,538	JPY	6,338	NA	NA	17.2	17.1	16.3	2.0	2.1	2.0	3%
Z Holdings	4689 JT	19,549	JPY	359	NA	NA	28.3	22.7	19.4	1.5	1.4	1.3	20%
CyberAgent	4751 JT	3,768	JPY	1,044	NA	NA	32.1	19.5	15.9	0.7	0.7	0.6	42%
Sony	6758 JT	124,651	JPY	13,860	NA	NA	18.8	16.9	15.9	1.5	1.4	1.4	11%
Capcom	9697 JT	11,016	JPY	5,796	NA	NA	36.7	32.7	30.3	10.6	9.6	9.0	10%
Oriental Land	4661 JT	69,875	JPY	5,388	NA	NA	92.2	73.7	64.8	16.7	14.2	13.3	20%
Nexon	3659 JT	17,981	JPY	2,961	NA	NA	23.1	20.1	18.4	6.0	5.5	5.1	13%
Average							24.0	19.5	18.1	3.8	3.5	3.4	10%
Average							21.2	18.0	16.0	3.8	3.4	3.1	14%

Source: Bloomberg, CMBIGM estimates

Investment Risks

- 1) Potential delay of key titles in 2H23E;
- 2) Underperformance of new titles launched;
- 3) Meaningful grossing decline of existing games with China's reopening and macro uncertainty;
- 4) Higher-than-expected S&M and AIGC investment;
- 5) Potential tightening on regulation on content; and
- 6) Geographical tension.

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

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

Source: Company data, CMBIGM estimates

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