

## Asia Online Games

# Post-COVID slowdown persisting into 3Q: Inflection point and pipelines key to watch; top ideas across the region

In this July-Aug edition of our Asia Online Games series, we expand our analysis to the broader **Asia Pacific region (c.60%** of worldwide mobile game revenue as of July), tracking the top **15 regional game publishers** across mainland China, South Korea, ASEAN, and Japan and the top **1,500 mobile games** by revenue in the world.

**July (global mobile game revenue -11% yoy**, mainland China -6%/Korea -6%/AESAN -8%/Japan +9%) continues to be a contrasting month with short-term industry fundamentals pressured by weaker broader gaming environment/post-COVID normalization, while leading game companies still envision long-term prospects of existing IP and forward pipeline by pursuing quality studios/developers through M&A.

**Investors' top of mind questions include: 1)** Asia game market post-Covid slowdown in the face of rising macroeconomic volatility, and potential inflection timeline before end-2022; **2)** China Banhao approvals for international games, especially for mainland China's top 2 players Tencent/NTES, **3)** Secular growth opportunities offered by the game verticals, with global game-related M&A remaining solid in both volume/transaction value in YTD2022, despite weaker near-term trends.

### What to expect next:

**Most gaming companies will report in next 2 weeks (detail dates in Exhibit 1)**, and we see forward guidance on 3Q trends, new game pipelines, and levers for legacy games as key points to monitor. Into 2H22, we see a continued post-Covid normalization trend in the global gaming market, both in/outside mainland China. We believe the broad **growth slowdown is likely to persist till 4Q22**, given the relatively high comps and varied reopening trend across regions. Key focus areas remain on the resilience of legacy games, Banhao approvals for Tencent/NTES and slowdown/inflection timeline for *PUBG mobile/Free Fire* titles.

**Investment ideas: Buy** - Tencent, NetEase (NTES/9999.HK), SEA; **Sell** - Netmarble, Krafton

**Relevant reports:** 1) **NetEase Inc.(NTES): 2Q preview: likely another solid quarter**

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on market share gain; re-sizing Diablo China revenue; Buy

2) **Sea Ltd. (SE)**: 2Q22 Preview: Expect GMV growth to decelerate but eCommerce cash burn to improve sequentially; Buy

3) **Krafton (259960.KS)**: In-line 2Q earnings expected but Street overly bullish on The Callisto Protocol; Maintain Sell; **NCSOFT Corp. (036570.KS)**: 2Q22E preview; Expect weak OP from steeper sequential LW revenue decline; Maintain Neutral

### Exhibit 1: Summary of our Asia Game coverage: Key watch points and debates, timeline of catalyst events, and differences between current 2022-July 2022 grossing run rate and our estimates

For Sea/Garena, the game revenue figure is referring to gross billing

Region	Rating	2021	2021	2Q22E game Rev %yoy		Key watch points & debates	Timeframe	2Q22 report date	2Q22 Rev %yoy		July 2022 Rev %yoy	
China	Ticker	Game Rev (US\$ mn)	Game % of group Rev	GSe	Consensus				SensorTower grossing (mobile game only)			
Tencent	700.HK	Buy	33,040	37%	-4%	-1%	1. International banhao approval grants 2. Stabilization of domestic game after base re-set 3. Intl. pipeline meets post-COVID slowdown	Since Aug-2022 Since Sept-2022 2H22	8/17/2022	Global China	-3% 4%	-13% -8%
NetEase	NTES	Buy	9,882	72%	3%	14%	1. Diablo China trend compared with HP China 2. Domestic banhao for Justice M & Naraka M 3. Harry Potter Japan release announcement	Aug/Sept-2022 End-2022 4Q22	8/18/2022	Global China	0% 6%	-8% -9%
Bilibili	BILI	Neutral	795	26%	-13%	-12%	1. International banhao approval (Pretty Derby) 2. Longevity of Pretty Derby in TW/HK 3. Decline of Space Hunter 3 compared w. Guardian Tales	Since Aug-2022 2H22 3Q22	Early Sept	Global China	-37% -39%	117% 122%
<b>Korea</b>												
NCSOFT	036570.KS	Neutral	1,942	100%	4%	22%	1. Natural decay rate of LW 2. PLC of LM & L2M (e.g. impact of June update) 3. Details on launch schedules & footage of TL	3Q22 2H22 4Q22	8/12/2022	Global	21%	23%
Krafton	259960.KS	Sell	1,649	100%	-7%	0%	1. PLC of legacy PUBG franchise games 2. Sales performance of Callisto Protocol 3. Rebound in PUBG New State	3Q22 12/2/2022 2H22	8/11/2022		-38% (PUBG global) 17% (Krafton self-pub)	
Netmarble	251270.KS	Sell	2,109	100%	40%	15%	1. Run-rate of CW global launch 2. Run-rate of SKR Korea launch	3Q22 3Q22	8/11/2022	Global	11%	1%
Pearl Abyss	263750.KQ	Neutral	340	100%	18%	7%	1. Run-rate of BDM China 2. Run-rate of Black Clover 3. Details on launch schedules & footage of CD	3Q22 2H22 4Q22	8/11/2022	Global	-31%	-49%
<b>ASEAN</b>												
SEA/Garena	SE	Buy	4,320	43%	-39%	-36%	1. FreeFire post-COVID decline to bottom 2. Update on pipeline expansion 3. OPM pressure from FreeFire & pipeline expansion	3Q22 2H22 2H22	8/16/2022	Global	-43%	-45%

Source: Company data, Goldman Sachs Global Investment Research, SensorTower, Visible Alpha Consensus Data

- **Mainland China (-6% yoy)**, despite (yoy %) industry weakness likely continuing into 3Q22E amid supply constraints, timespent declining on re-opening, industry wide base-effect and weakened macro; all eyes remain on new approvals, grossing trend of legacy games:
  - **Tencent (-8% yoy domestic Monthly Grossing)**. Investor focus will likely be on whether Tencent games may be included in the next batch of approvals (esp. international game approvals) and grossing stabilization on legacy games. For international games, Tencent with its 2H international pipeline could continue to outperform global peers on room for market share gains. Near-term, % yoy decline in Monthly Grossings in July has widened from June in domestic markets, though we note the base re-set of minor gaming contribution for domestic games should begin in Sept-22. **Key areas to watch: 1)** Sept domestic grossing performance following the rebase; **2)** International game's Banhao approvals, **3)** stabilization of *PKE/PUBGM* titles domestically/internationally, **4)** Pace and consolidation of global gaming M&A deals.

- **NetEase: (-9% yoy domestic).** We expect game revenues to grow at 13% yoy in 2Q22E, 20ppts quicker pace of growth relative to industry underpinned by market share gains across both mobile and PC games; **Key areas to watch: 1)** Domestic Banhao approvals (*Justice Mobile*, *Naraka Mobile* likely year-end/early 2023), **2)** run-rate of *Diablo Immortal* mainland China; **3)** 4Q22 release of *Harry Potter* Japan.
- **Bilibili: Global grossing (ex. jointly-operated games) +114% yoy in July (domestic +122% yoy, international +84% yoy),** with the inflection underpinned by release of *Space Hunter 3* in mainland mainland China and *Pretty Derby* in Taiwan. While we note *Pretty Derby* monthly grossing remains solid in August, IOS grossing ranking of *Space Hunter 3* has declined meaningfully.
- **ASEAN (-8% yoy),** specifically for **SEA's (-45% yoy)** Garena, we believe **1)** the stabilizing of **Free Fire's grossing** following the post-Covid fatigue and **2)** more visibility on **pipeline** are the key catalyst for Sea. In the past few months, we have been encouraged by the stabilized user engagement since March, with **Free Fire+Free Fire Max MAU edging up** on a MoM basis in **July**, by refreshing content and incentivizing time spent. However, **grossing remains weak** heading into 3Q22, as Garena intentionally slowed monetization to retain users. We expect Garena to increase monetization at a paced schedule post the recovery of user engagement, and hence **grossing to bottom in 3Q22E.**
- **Korea (-6% yoy):** With key game launches slated toward the latter part of the year, we believe the main debates around the companies will be **product life cycle management** for existing games before **new games kick in** and **incremental data** (i.e. exact launch date, pre-launch marketing activities, details on business model) on upcoming blockbuster games before their launch.
  - **For NCSOFT (+23% yoy),** we believe the revenue trajectory of *LW* and *LM* will be key drivers of earnings while investors will be mostly looking for more details around *TL* launch in 4Q (key interest around specific business model). We expect *LW* (Region 1, launched Nov 2021) to sequentially decline by c.40% in 2Q22E as we observe *LW Korea* grossing rankings have been competing shoulder to shoulder with *LM* throughout 2Q, whereas we had expected *LW* to remain a solid #1. In Taiwan, *LW* has maintained robust grossing ranking #1 throughout 2Q.
  - **For Krafton (-21% yoy Krafton self-pub),** we expect *PUBG* franchise mobile revenue to drive near-term earnings but the main event for the year will likely be the launch of *The Callisto Protocol*, which recently set its launch date to Dec 2, 2022, improving visibility for the pipeline. With 2Q22 being a relatively weak season, we expect mobile revenue to decline (-11% YoY, 21% QoQ), which drives an 18% sequential decline for the overall top line (-7% YoY) accordingly. Mostly driven by QoQ decline in top line, OP will also decline sequentially, W160bn on our estimate.
  - **For Pearl Abyss (-49% yoy),** we believe investor expectations are likely low for **BDM mainland China** being a turnaround given the lukewarm datapoints

thus far post its Apr launch. We also think there could be some risk of game launch delay around *Crimson Desert* (current expectation of 4Q22 launch). The most imminent launch would be *Black Clover Mobile* (RPG, Korea/Japan), which we expect to be launched in 3Q22 (GSe).

- **For Netmarble (+1% yoy)**, which saw an OP loss in 1Q, we believe key debates for the short term would be on its top-line recovery through new game launches - namely, *Cross Worlds*' global launch (May 25) and *Seven Knights Revolution Korea* (July 28).

\* Unless otherwise stated, all grossing figures are yoy % trends of July-2022.

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### Exhibit 2: Global mobile game grossing revenue yoy % trend by region

As the global mobile game industry (ex. mainland China) is in the midst of a transition against tough comps created by the pandemic benefits for the majority of 2022, global mobile game grossing saw another -11% yoy in July or -3% for 2yr CAGR.

Global mobile game	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
YoY% - global	-6%	-7%	-6%	-2%	-8%	-11%	-11%
2yr CAGR% - global	11%	9%	7%	4%	-2%	-2%	-3%
YoY% - region							
China (constant FX)	2%	-13%	3%	13%	10%	-3%	-6%
Korea (constant FX)	-1%	10%	26%	16%	3%	-4%	-6%
Japan (constant FX)	-12%	-7%	-9%	-4%	0%	5%	9%
ASEAN (USD)	-8%	-10%	-5%	1%	-5%	-6%	-8%
Global Ex.China	-8%	-5%	-8%	-6%	-11%	-12%	-11%

Source: SensorTower, Goldman Sachs Global Investment Research



Exhibit 3: Key Asia Gaming names' monthly snapshot

		Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
<b>China</b>	<b>Ticker</b>	<b>Monthly Grossing YOY %</b>						
Tencent - domestic	700.HK	-8%	-9%	1%	7%	8%	-4%	-8%
Tencent - intl.		12%	2%	6%	-25%	-27%	-40%	-36%
NetEase - domestic	NTES	-13%	-31%	-11%	4%	9%	4%	-9%
NetEase - intl.		-9%	-28%	-22%	-5%	-29%	-29%	-8%
Bilibili - domestic	BILI	63%	0%	46%	-33%	-53%	-25%	122%
Bilibili - intl.		-8%	28%	75%	28%	-69%	-13%	84%
XD - domestic	2400.HK	19%	7%	40%	80%	90%	77%	65%
XD - intl.		-18%	-30%	-31%	-39%	-28%	-16%	-2%
MiHoYo - domestic	Unlisted	66%	-4%	56%	150%	56%	155%	8%
MiHoYo - intl.		29%	-4%	-7%	23%	-41%	35%	-24%
<b>Korea</b>								
Netmarble	251270.KS	-19%	-21%	-34%	20%	42%	-14%	1%
NCSOFT	036570.KS	61%	82%	108%	25%	26%	13%	23%
NEXON	3659.T	-21%	-18%	30%	79%	49%	26%	38%
Pearl Abyss	263750.KQ	-45%	-45%	-30%	-16%	-34%	-41%	-49%
<b>Japan</b>								
BANDAI NAMCO	7832.T	-46%	-36%	-45%	-37%	26%	104%	23%
CyberAgent	4751.T	60%	51%	-29%	-44%	-26%	-32%	-21%
SQUARE ENIX	9684.T	-25%	-26%	-32%	-30%	-18%	5%	22%
Konami	9766.T	-23%	16%	-6%	10%	-17%	-14%	-10%
<b>ASEAN</b>								
SEA/Garena	SE	-9%	-17%	-22%	-32%	-48%	-48%	-45%
<b>Global mobile game</b>		<b>-6%</b>	<b>-7%</b>	<b>-6%</b>	<b>-2%</b>	<b>-8%</b>	<b>-11%</b>	<b>-11%</b>

Source: SensorTower, Company data, data compiled by Goldman Sachs Global Investment Research

**Exhibit 4: Key Asia online gaming stocks comp sheet**

Japan game publishers data are based on Visible Alpha Consensus Data, and the rest are based on GSe

Company	Primary Analyst	Ticker	fx	Last Price	Target Price	+/- Side	Rating	Mkt Cap (US\$mn)	ADTV	Performance 1Mo	YTD	Fiscal Year	PE n-Gapp 22F	23F	EPS CAGR 21-23	23F	Rev CAGR 21-23	2023F	
<b>China game</b>																			
Tencent	Ronald Keung, CFA	0700.HK	HK\$	298.00	503.00	68.8%	Buy	368,044	1,105	-15.5%	-34.8%	Dec	21.8x	15.7x	13%	39%	7%	13%	
NetEase	Lincoln Kong, CFA	NTES	\$	89.38	120.00	34.2%	Buy	59,454	198	-1.7%	-12.2%	Dec	19.3x	16.4x	9%	18%	13%	14%	
NetEase HK	Lincoln Kong, CFA	9999.HK	HK\$	138.80	187.00	34.7%	Buy	58,808	150	-1.0%	-11.5%	Dec	18.7x	17.2x	6%	14%	10%	10%	
Bilibili	Lincoln Kong, CFA	BILI	\$	24.11	28.00	35.1%	Neutral	9,526	180	-30.0%	-48.0%	Dec	NM	NM	NM	-37%	23%	33%	
Bilibili HK	Lincoln Kong, CFA	9626.HK	HK\$	192.60	219.00	33.7%	Neutral	9,694	62	-9.3%	-46.3%	Dec	NM	NM	NM	-96%	26%	33%	
<b>Median (Sum for Mkt cap)</b>						<b>34%</b>		<b>505,526</b>	<b>1,675</b>	<b>-9.3%</b>	<b>-34.8%</b>		<b>19.7x</b>	<b>16.4x</b>	<b>9%</b>	<b>14%</b>	<b>13%</b>	<b>14%</b>	
<b>ASEAN game</b>																			
Sga	Pang Vittaya mnuaykoon	SE	\$	83.53	176.00	111%	Buy	51,626	503	7.8%	-52.7%	Dec	NM	NM	NM	-73%	30%	29%	
<b>Korea game</b>																			
NCSOFT	Eric Cha	036570.KS	₩	412,000	430,000.00	4%	Neutral	6,933	39	10.3%	-35.9%	Dec	20.0x	20.4x	2%	-2%	7%	0%	
Namtable	Eric Cha	252270.KS	₩	73,500	82,000.00	13%	Sell	4,843	12	7.0%	-41.2%	Dec	22.8x	19.7x	12%	15%	16%	6%	
Popri Abyss	Eric Cha	269750.XQ	₩	61,800	65,000.00	6%	Neutral	3,112	18	16.5%	-55.7%	Dec	NM	16.9x	91%	551%	32%	78%	
Krafton	Eric Cha	259960.KS	₩	263,000	210,000.00	-20%	Sell	9,435	44	11.0%	-42.8%	Dec	17.9x	22.0x	-1%	-19%	4%	1%	
<b>Median (Sum for Mkt cap)</b>						<b>5%</b>		<b>24,323</b>	<b>113</b>	<b>10.6%</b>	<b>-42.0%</b>		<b>20.0x</b>	<b>20.1x</b>	<b>7%</b>	<b>7%</b>	<b>12%</b>	<b>3%</b>	
<b>US/Europe game</b>																			
Electronic Arts	Eric Sheridan	EA	\$	129.28	133.00	3%	Neutral	36,328	329	2.9%	-2.0%	Mar	18.2x	16.8x	7%	8%	10%	7%	
Playtika	Eric Sheridan	PLTK	\$	11.46	15.00	31%	Neutral	4,731	29	-12.9%	-33.7%	Dec	19.3x	14.8x	2%	30%	3%	6%	
Roblox	Eric Sheridan	RBLX	\$	47.35	28.00	-41%	Sell	27,866	1,121	14.8%	-54.1%	Dec	NM	79.5x	-25%	35%	21%	22%	
Take Two	Eric Sheridan	TTWO	\$	120.76	131.00	8%	Neutral	20,227	361	-3.3%	-32.1%	Mar	25.2x	18.6x	9%	36%	39%	28%	
Ubisoft	Eric Sheridan	UBIP.PA	€	44.91	41.00	-9%	Sell	5,847	24	7.1%	4.3%	Mar	39.1x	24.9x	65%	57%	2%	6%	
<b>Median (Sum for Mkt cap)</b>						<b>3%</b>		<b>94,999</b>	<b>1,864</b>	<b>2.9%</b>	<b>-32.1%</b>		<b>22.2x</b>	<b>18.6x</b>	<b>4%</b>	<b>32%</b>	<b>7%</b>	<b>10%</b>	
<b>Japan game</b>																			
Nintendo		7974.T	¥	57,800.00			Coverage Suspended	50,580	269	-1.1%	6.8%	Mar							
Bandai Namco		7832.T	¥	10,035.00			Coverage Suspended	16,335	45	0.9%	11.6%	Mar							
Nexon		3659.T	¥	2,814.00			Coverage Suspended	18,417	38	-4.3%	26.5%	Dec							
Coscom		9697.T	¥	3,650.00			Coverage Suspended	5,775	27	-0.5%	34.8%	Mar							
Konami		9766.T	¥	7,060.00			Coverage Suspended	6,969	26	-1.1%	27.9%	Mar							
Square Enix		9684.T	¥	6,260.00			Coverage Suspended	5,533	26	3.5%	6.1%	Mar							
<b>Median (Sum for Mkt cap)</b>								<b>103,610</b>	<b>411</b>	<b>-0.8%</b>	<b>19.1%</b>								

TPs are based on a 12-month period.

Source: Company data, Goldman Sachs Global Investment Research, Visible Alpha Consensus Data

## Mainland China: Industry-wide weakness to continue yet diverging trend from market share gainers persist

Exhibit 5: Mobile game grossing YoY% and MoM% trends: domestic and international (ex.mainland China)

Domestic mobile	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
YoY% - domestic	2%	-13%	3%	13%	10%	-3%	-6%
MoM% - domestic	15%	-14%	16%	8%	0%	-13%	1%
International mobile (total)							
YoY% - international	-8%	-5%	-8%	-6%	-11%	-11%	-11%
MoM% - international	-2%	-9%	3%	-3%	-3%	-4%	6%
International mobile (Chinese publishers)							
Market share% - CN publishers	16.2%	15.4%	15.7%	16.1%	15.6%	14.8%	15.3%
YoY% - international	-8%	-16%	-10%	-12%	-19%	-21%	-15%
MoM% - international	5%	-14%	5%	0%	-6%	-9%	10%

Source: SensorTower, data compiled by Goldman Sachs Global Investment Research

**Domestic performance: Industry weakness (yoy %) to continue in 3Q22.** Since May-22, mainland China's mobile game industry has encountered headwinds including: **1) Game supply constraints** amid lower quantity of Banhao approvals, especially towards relatively high-ARPPU games; **2) Game timespent dropping on re-opening** in economically developed regions in mainland China, which has led to a redirection of user timespent/dollar spent to physical goods, with total timespent on games growing **+7% yoy** (vs. 21% yoy in April); **3) Industry-wide base effect** given controls around minor gaming timespent/spending, commenced since Sept-21; and **4) Weakened macro** that has dented users' online entertainment spending. While we view most of the headwinds as cyclical (except for NPPA's banhao issuance preference), we still see limited likelihood for the industry to resume positive yoy (%) growth in the upcoming months given the low visibility on industry pipeline, as the 4 batches of banhao approvals issued YTD did not include new titles that demonstrate blockbuster potential, in our view.

**July grossing -6% yoy** in the domestic mainland China market, widened the decline from -3% yoy in June. **By company, Monthly Grossings:** Tencent -8% yoy/+7% mom, NetEase -9% yoy/-4% mom, Bilibili +122% yoy/+67% mom, according to SensorTower.

**Domestic regulation:** On 1 August, the NPPA issued the 4th batch of approvals of the monetization license (Banhao) for 69 domestic games (our [note](#)), on par with the 67 approvals in the 3rd July batch issued 20 days ago. Aside from the further shortened approval time frame (20 days vs. 34 for the 3rd batch and 57 for the 2nd batch) as well as the issuance focus skewing towards SMEs, we note Bilibili received 1 approval, after already obtaining 2 approvals in the July batch. No Banhao has been granted to Tencent/NetEase just yet.

**International expansion: Wider-than-industry magnitude of decline for Chinese publishers.** While the global mobile game industry (ex. mainland China) is in the midst of a transition against tough comps created by the pandemic benefits for the majority of

2022, grossings saw another **-11% yoy/-15% yoy** decline for industry/Chinese game publishers in July. We observe the weaker-than-industry performance of Chinese publishers **by-company**: Tencent -36% yoy given the high base of Supercell and grossing drop of *PUBGM*; NetEase -8% yoy. Bilibili saw its July international grossing +67% yoy, primarily due to the release of *Pretty Derby* in Taiwan market.

### Latest game grossing trends from Tencent, NetEase and Bilibili

**Tencent: Global mobile grossing -13% yoy (domestic -8% yoy constant FX, international -36% yoy)** in July, a month with widened decline from domestic markets, with the company entering the last month before the base re-set of minor gaming contribution starting Sept-22. **By key title:**

- **Internationally, 1)** *PUBGM* grossing was hindered by post-COVID normalization, with July grossing dropping 39% yoy, with the weakness to likely extend towards year-end **2)** Supercell grossing declined by 34% yoy. We note the SensorTower grossing has not captured PC game revenue trend (such as *V Rising*, that has contributed over US\$50mn)
- **Domestically,**
  - **Legacy games:** *Honour of Kings (HoK)* saw grossing growth at -3% yoy in July, with the season 28 expansion pack, released on June 23, supporting July grossing, despite the challenging comps. *Peacekeeper Elites (PKE)* saw grossing decline of -45% yoy in July, against a record high comp in July-2021, also partly due to the decline of revenue from change in controls around minors game timespent.
  - **New games:** *LOL: E-sport manager (英雄联盟电竞经理)*, the e-sport simulation adaption game that is based off the *LOL* IP has turned out to be Tencent's largest new release domestic game on grossing contribution, with **2.0% total market share in July** (despite just being launched on 20 July).

**NetEase: Global grossing -8% yoy (domestic -9% yoy constant FX, international -8% yoy) in July**, as *Diablo Immortal's* grossing contribution has not fully kicked-in in July. **By key title:**

- **Internationally,** NetEase's grossing dropped 8% yoy in July, driven by a combination of a 21% decline in JPY:USD but offset by solid traction in *Knives Out Japan*, through its IP collaboration with One Piece and Sword Art Online.
- **Domestically:**
  - ***Diablo Immortal*** was released 25 July, contributing 11% of NetEase July grossing. We now project the game to gross Rmb4.1bn for the first year or c.Rmb890mn for first month, after attaining c.Rmb270mn grossing for the first week since July 25.
  - **Legacy games:** *Fantasy Westward Journey (FWJ)* saw grossing -21% yoy in July, after its 4 consecutive month of grossing growth (Mar-June 2022). ***Harry Potter China*** saw grossing -15% mom in July, remaining on a declining curve. *Infinite Lagrange* remains as NetEase's 3rd largest mobile game domestically

in July, which we expect to gross Rmb536mn/Rmb2.1bn revenue in 2Q22E/2022E, reflecting user re-acceleration on a major content expansion update and corresponding user acquisition spending.

**Bilibili: Global grossing (ex. jointly-operated games) +117% yoy in July (domestic +122% yoy, international +84% yoy)**, with the inflection underpinned by release of *Space Hunter 3* in mainland China and *Pretty Derby* in Taiwan. While we note *Pretty Derby* grossing remains solid in August, IOS grossing ranking of *Space Hunter 3* has declined meaningfully.

#### Exhibit 6: Tencent: international and domestic grossing performances

Tencent international mobile game grossing includes Supercell, Miniclip, Pocket Gems and Marvelous

Tencent 腾讯 - International		Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
International Grossing % yoy		12%	2%	6%	-25%	-27%	-40%	-36%
International Market share %		4.8%	4.5%	4.7%	4.4%	4.4%	3.8%	3.5%

Tencent 腾讯 - domestic		Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
Domestic Grossing % yoy - constant FX		-8%	-9%	1%	7%	8%	-4%	-8%
Domestic Grossing % mom - constant FX		27%	-9%	6%	8%	-1%	-14%	7%

Grossing % yoy - by titles		Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
Honour of Kings	王者荣耀							-3%
PeaceKeeper Elite	和平精英							-45%
League of Legends Mobile	英雄联盟手游							0%
Return to Empire	重返帝国							0%
Cross Fire	穿越火线手游							-13%
Teamfight tactics	金铲铲之战							0%
QQ Speed	QQ飞车							-17%
Naruto	火影忍者							-26%
Moon Light Blade	天涯明月刀							-68%
LoL: E-sport manager	英雄联盟电竞经理							0%

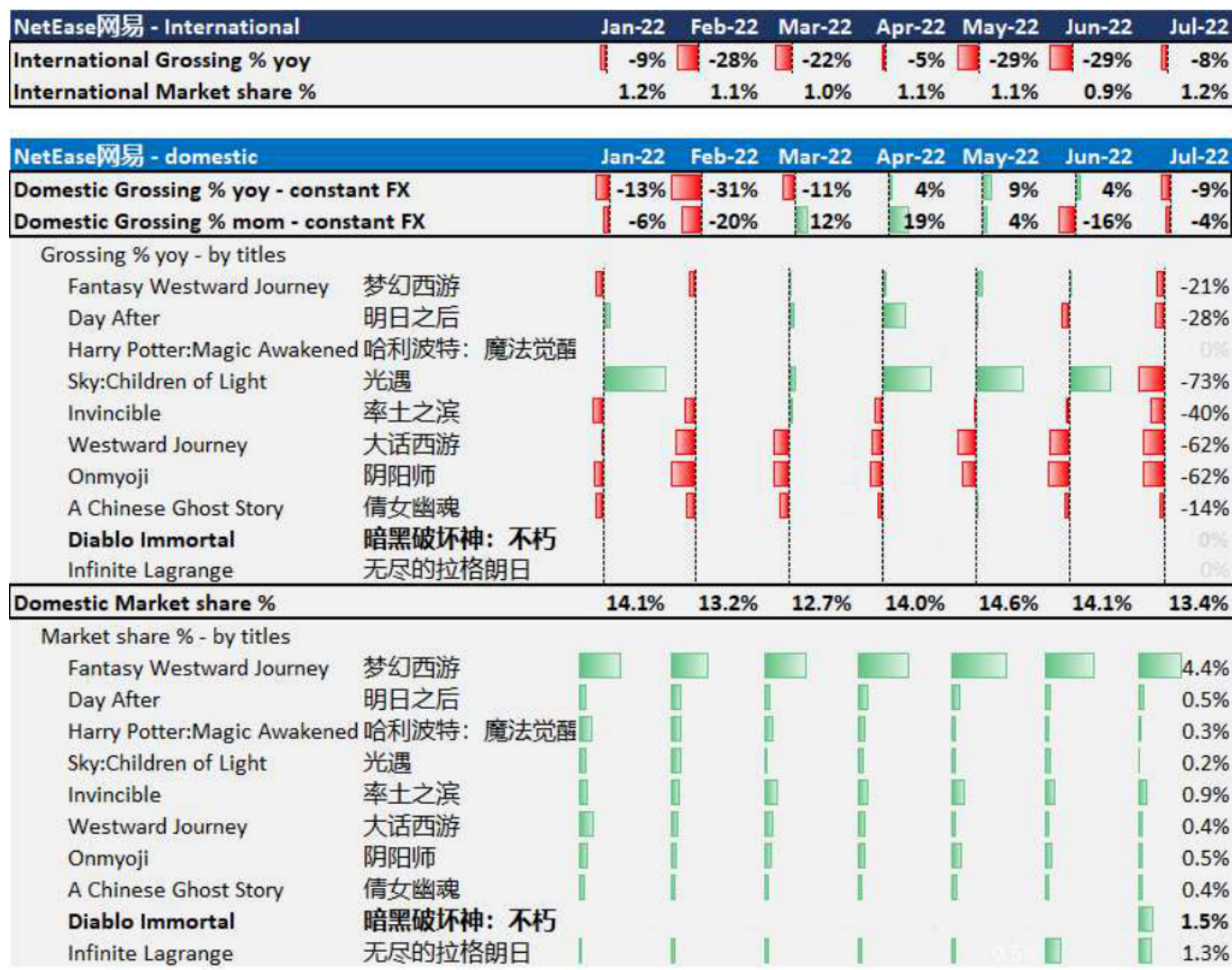
  

Domestic Market share %		Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
Market share % - by titles								
Honour of Kings	王者荣耀							17.9%
PeaceKeeper Elite	和平精英							9.5%
League of Legends Mobile	英雄联盟手游							1.9%
Return to Empire	重返帝国							0.3%
Cross Fire	穿越火线手游							1.5%
Teamfight tactics	金铲铲之战							2.2%
QQ Speed	QQ飞车							1.2%
Naruto	火影忍者							0.9%
Moon Light Blade	天涯明月刀							0.5%
LoL: E-sport manager	英雄联盟电竞经理							2.0%

Source: SensorTower, data compiled by Goldman Sachs Global Investment Research



Exhibit 7: NetEase: international and domestic grossing performances



Source: SensorTower, data compiled by Goldman Sachs Global Investment Research



Exhibit 8: Bilibili: international and domestic grossing performances

Bilibili哔哩哔哩 - International	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
International Grossing % yoy	-8%	28%	75%	28%	-69%	-13%	84%
International Market share %	0.08%	0.05%	0.04%	0.03%	0.04%	0.19%	0.13%

Bilibili哔哩哔哩 - domestic	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
Domestic Grossing % yoy - constant FX	63%	0%	46%	-33%	-53%	-25%	122%
Domestic Grossing % mom - constant FX	-19%	-41%	-14%	15%	56%	19%	67%



Domestic Market share %	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
	0.9%	0.6%	0.5%	0.5%	0.8%	1.1%	1.7%



Source: SensorTower, data compiled by Goldman Sachs Global Investment Research

Exhibit 9: XD: international and domestic grossing performances

XD心动 - International	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
International Grossing % yoy	-18%	-30%	-31%	-39%	-28%	-16%	-2%
International Market share %	0.16%	0.14%	0.12%	0.11%	0.15%	0.18%	0.16%

XD心动 - domestic	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
Domestic Grossing % yoy - constant FX	19%	7%	40%	80%	90%	77%	65%
Domestic Grossing % mom - constant FX	18%	-3%	5%	6%	4%	2%	-9%



Domestic Market share %	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%



Source: SensorTower, data compiled by Goldman Sachs Global Investment Research

## Timespent and Engagement of mainland China's top 50 mobile games dropped 2% in July 2022, at similar pace compared with -1% in June, given consumer behavior change after lockdown lifted since June

Exhibit 10: Games: timespent on games dropped 2% yoy in July, largely on par with -1% yoy in June.

Game	Timespent % yoy	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07
Honour of Kings	王者荣耀	-9%	-17%	-22%	-18%	-28%	-2%	4%	-13%	-22%	-21%
Peacekeeper Elite	和平精英	-18%	-18%	-24%	-12%	-21%	4%	26%	13%	-5%	-10%
Anipop	开心消消乐	22%	17%	14%	21%	37%	32%	32%	22%	17%	24%
Fight of The Golden Spatula	金铲铲之战										
Genshin Impact	原神	-19%	10%	12%	105%	68%	86%	135%	76%	91%	94%
League of Legends: Wild Rift	英雄联盟手游										
Huanle Doudizhu (Tencent)	欢乐斗地主 (腾讯)	8%	-6%	-14%	-19%	-23%	-32%	-32%	-30%	-34%	-32%
Tencent Huanle Mahjong	腾讯欢乐麻将全集	3%	4%	2%	5%	20%	2%	2%	-6%	-15%	-12%
Tiantian Xiangqi	天天象棋	13%	8%	7%	11%	11%	19%	26%	19%	15%	23%
CrossFire: Legends	穿越火线: 枪战王者	-47%	-50%	-55%	-37%	-30%	-4%	3%	-16%	-25%	0%
<b>Total</b>		<b>13%</b>	<b>11%</b>	<b>-1%</b>	<b>-2%</b>	<b>-11%</b>	<b>12%</b>	<b>21%</b>	<b>7%</b>	<b>-1%</b>	<b>-2%</b>

Game	Timespent % share	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07
Honour of Kings	王者荣耀	40%	37%	37%	40%	39%	39%	40%	39%	39%	39%
Peacekeeper Elite	和平精英	11%	11%	12%	15%	17%	15%	16%	15%	13%	15%
Anipop	开心消消乐	7%	7%	8%	7%	7%	8%	8%	8%	8%	8%
Fight of The Golden Spatula	金铲铲之战	4%	5%	6%	4%	4%	5%	4%	5%	6%	5%
Genshin Impact	原神	3%	3%	3%	4%	4%	4%	4%	4%	4%	5%
League of Legends: Wild Rift	英雄联盟手游	12%	14%	9%	6%	4%	4%	4%	4%	4%	4%
Huanle Doudizhu (Tencent)	欢乐斗地主 (腾讯)	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%
Tencent Huanle Mahjong	腾讯欢乐麻将全集	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Tiantian Xiangqi	天天象棋	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CrossFire: Legends	穿越火线: 枪战王者	2%	1%	2%	2%	2%	2%	2%	2%	2%	2%

Source: QuestMobile, data compiled by Goldman Sachs Global Investment Research

### Imminent game pipeline update:

**1) Tencent** now possesses a confirmed pipeline of 40+ new games dedicated to global audiences, which will be published by Level Infinite and other subsidiaries in 2022E-2024E, including 20+ games for 2022 as of May.

- **Domestic: LOL: E-sport manager** (英雄联盟电竞经理), the e-sport simulation adaption game that's based off the *LOL IP* has turned out to be Tencent's largest new-release domestic game based on grossing contribution, with **2.0% total market share in July** (despite having only been launched on 20 July).
- **International - investee studios & partnership: 1) V Rising**, the PC survival action RPG developed by Tencent investee, Stunlock Studio, sold 2.5mn copies as it went into early access on May 17, grossing over US\$50mn; **2) Into 3Q22**, Tencent will release *Metal: Hellsinger* through Funcom; *Tower of Fantasy* through Level Infinite and *Turbo Golf* through Sumo Group.

**2) NetEase** has 5 games (with Banhao) pending launches domestically, yet with only 1 game with a confirmed release date - *Viva Le Football* for 1 Oct. Longer term, we expect:

- **Diablo: Immortal**, the action RPG title that is co-developed with Activision Blizzard, was released in mainland China on 25 July. With the game tracking at No. 2/3 on the IOS grossing chart for the first week, we currently estimate the game to gross **Rmb0.9bn/Rmb4.1bn in cash revenues in first month/12 months**.



- **Harry Potter: Magic Awakened:** Confirmed **2022 global release**, with its overseas closed beta testing (incl. Japan, where NetEase will be the main publisher) concluded on **30 July**. We estimate the Japan version to be launched in **4Q22E**, and reach a similar level of grossing as *Knives Out* (2-3% of Japanese mobile game market share).
  - **Naraka: BladePoint Mobile:** We estimate the game could reach a potential **Rmb6.1bn** revenue (equivalent to 10% of our 2023E mobile game revenue assumption). We expect potential Banhao approval for the game as early as March 2023.
  - **Justice Mobile:** We expect Banhao approval as early as end-2022 or 1H23 using average lead-time of NetEase domestic games, or historical martial-arts MMORPG games' lead-time as proxy.
- 3) Bilibili:** Bilibili has a total of 7 games in the pipeline slated for 2H22-1H23 release, after obtaining 3 approvals of its domestic games: **1) Non-anonymous instruction** (非匿名指令), a mobile based CCG game with 141k pre-registration users on Bilibili, and has kicked-off the beta test on 4-Aug-2022; **2) ChangAn Bai Wan Guan** (长安百万贯), a mobile based business simulation game with 79k pre-registration users on Bilibili app store.

**Exhibit 11: Tencent: domestic game pipeline**

English Name	Chinese Name	Banhuo Status	CP	Genre	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Rest 2022
<b>Game launched</b>					1Q22			2Q22			3Q22			
Stairway to Stardom	璀璨星途	Approved	Tencent	Simulation	Public testing on 13 Jan									
The Story of Yanxi Palace	延禧攻略之凤凰于飞	Approved	Tencent	Casual		Public testing on 15 Feb								
Xuan Zhong Ji	玄中记	Approved	Seasun	SLG		Public testing on 18 Feb								
Wo Long Yin 2	卧龙吟 2	Approved	Seasun	SLG	2nd Beta testing on 4 Jan	Public testing on 22 Feb								
Joy of Life	庆余年	Approved	Tencent	MMORPG	Beta testing on 20 Jan		Public testing on 25 Mar							
Return to Empire	重返帝国	Approved	Tencent	SLG			Public testing on 29 Mar							
Noah's Heart	诺亚之心	Approved	Archosaur Games	RPG				Public testing on 13 April						
Black Desert	黑色沙漠	Approved	Tencent	RPG	Beta testing on 13 January			Public testing on 26 April						
Code: Three Kingdom	乱世逐鹿: 风起三国	Approved	Tencent	SLG			Final testing on 21 Mar		Public testing on 26 May					
3 on 3 Freestyle	全民大灌篮	Approved	Tencent	Sports						Public testing on 10 June				
Zhi Jian Ling Zhu	指尖领主	Approved	Tencent	Casual					Beta testing on 30 May		Public testing on 5 July			
Arena Breakout	暗区突围	Approved	Tencent	FPS	Beta testing on 14 Jan	Beta testing on 23 Feb	Beta testing on 31 Mar		Beta testing on 17 May		Public testing on 13 July			
League of Legends: e-sport manager	英雄联盟: 电竞经理	Approved	Tencent	SLG			Alpha testing on 18 Mar				Public testing on 20 July			
<b>Game pipeline</b>														
Kitten Match	小猫爱消除	Approved	Tencent	Casual								Public testing on 24 August		
One-Punch Man Justice is Served	一拳超人正义执行	Approved	Tencent	Action									Public testing on 30 September	
Chio Hero	奇奥英雄传	Approved	Tencent	Strategy										Public testing on 15 November
New Eternal Love	新三生三世十里桃花	Approved	Tencent	RPG										Public testing on 31 December
Music World	劲乐幻想	Approved	Tencent	Music										Public testing on 31 December
Handmade Planet	手工星球	Approved	Tencent	Sandbox										Public testing on 31 December
Bu Liang Ren3	不良人3	Approved	Tencent	Action										Public testing on 31 December
Mobile DnF	地下城与勇士	Approved	Nexon	MMOACT			Intl. launch in Mar 2022							
Dawn Awakening	黎明觉醒	Approved	Tencent	Survival										Public testing delayed to 2022
Uncharted Waters: Lord of the sea	大航海时代: 海上霸主	N	Tencent	Strategy										Public testing on 11 November
New Nobunaga's Ambition	新信长之野望	N	Tencent	Strategy										Public testing on 24 November
Wu Xu Ci Yuan	无序次元	N	Tencent	Action							Beta testing on 14 July			
Apex Legends Mobile	Apex英雄手游	NA	Tencent	Shooting					International soft launch in May 2022					

Source: Company data, Goldman Sachs Global Investment Research

Exhibit 12: NetEase: domestic game pipeline

English Name	Chinese Name	Genre	Platform	Banhao Approve	Approval Date	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Rest 2022	
<b>Game launched</b>						3Q21			4Q21			1Q22		2Q22					
Marvel Super War	漫威超级战争	MOBA	Mobile	Y	12/2/2020	Public testing on July 15													
Racing Master	王牌竞速	Racing	Mobile	Y	12/31/2020	Public testing on July 23													
Code: Moon	月神的迷宫	Card	Mobile	Y	7/1/2020	Public testing on July 27													
Shaqi 2	有杀气童话2	MMO	Mobile	Y	12/9/2019	Public testing on July 29													
EVE: Echos	星战前夜: 无烬星河	Sandbox	Mobile	Y	2/9/2021	Public testing on Aug 5													
<b>NARAKA: BLADEPOINT</b>	<b>永劫无间</b>	<b>Action</b>	<b>PC</b>	<b>Y</b>	<b>9/21/2020</b>	Final testing on July 6	Public testing on Aug 12												
Primitive Civilization	洪荒文明	SLG	Mobile	Y	5/24/2021	Final testing on July 16	Public testing on Aug 12												
Infinite Lagrange	无尽的拉格朗日	Battle	Mobile	Y	10/23/2019	Public testing on July 2	Public testing on Aug 18												
Harry Potter: Magic Awakened	哈利波特: 魔法觉醒	Card/RPG	Mobile	Y	8/6/2020	Public testing on Sept 9													
Marvel Duel	漫威对决	CCG	Mobile	Y	6/28/2021	Alpha testing on July 2	Beta testing on Aug 20	Public testing on Sept 28											
Dream Chaser: the Showbiz	绝对演绎	Simulation	Mobile	Y	3/19/2021						Public testing on Dec 24								
Slick Fight: The Game	逆斗火柴人	Action	Mobile	Y	6/28/2021						Public testing on Dec 30								
Roar of War	战争怒吼	RTS	Mobile	Y	9/29/2020						Alpha testing on Dec 29								
Eggy Go	蛋仔派对	Casual	Mobile	Y	7/22/2021	Banhao Approved		Beta testing on Sept 28			Beta testing on Dec 24								
Diablo Immortal	暗黑破坏神: 不朽	ARPG	Mobile	Y	2/9/2021	Alpha testing on 15 July		Beta testing on Sept 28		Beta testing on 29 Nov					Final testing on 14 April	Public testing on 27 May		Public testing on 25 July	
<b>Game pipeline</b>																			
Vive Le Football	绿茵信仰	Sports	Mobile	Y	4/27/2021		Beta testing on Aug 21					Beta testing on Jan 14				Beta testing on May 20		Public testing on 1 Oct	
Ghost World Chronicle	倩女幽魂: 阴阳世录	CCG	Mobile	Y	8/8/2019							Development update in Jan							
Steam Fighter: Alliance	蒸汽战棋: 联盟	SLG	Mobile	Y	6/28/2021														
Fishing Contest	钓鱼大对决	Casual	Mobile	Y	6/28/2021														
Candy Crush Friends Saga	糖果缤纷乐	Casual	Mobile	Y	12/2/2020														
Mission Zero	零号任务	Action	Mobile	N	-		Alpha testing on Aug 19					Beta testing on Jan 10							
Code name: Candle	代号: 烛	Action	Mobile	N	-							Alpha testing on Jan 14							
Onmyoji: Yokai Class	阴阳师: 妖怪小班	CCG	Mobile	N	-	Alpha testing on July 9								Beta testing on Mar 18					
Firefly Assault	萤火突击	Shooting	Mobile	N	-			Alpha Testing on Sept 23											
<b>NARAKA: BLADEPOINT - 永劫无间主机版</b>	<b>永劫无间主机版</b>	<b>Action</b>	<b>Console</b>	<b>N</b>	<b>-</b>													Release 2022 worldwide	
<b>NARAKA: BLADEPOINT - 永劫无间手机版</b>	<b>永劫无间手机版</b>	<b>Action</b>	<b>Mobile</b>	<b>N</b>	<b>-</b>													2m pre-reg on TapTap	

Source: Company data, Goldman Sachs Global Investment Research



Exhibit 13: Bilibili: domestic and international pipeline

English Name	Chinese Name	Genre	Platform	BanHao Approved	License Approval Date	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Rest 2022					
<b>Game launched</b>						3Q21			4Q21			1Q22			2Q22			3Q22							
Zhan Yao Xing	斩妖行	Action	PC	Y	4/27/2020	Public testing on July 8																			
Beatless	空匣人型	Action/ACG	Mobile	Y	6/15/2020	Public testing on July 8																			
Pride of Eden	伊甸园的骄傲	Card	Mobile	Y	2/7/2021	Public testing on July 15																			
Gu Jian Qi Tan	古剑奇谭木卫人	Card/RPG	Mobile	Y	4/8/2020	Public testing on July 27																			
Warm Snow	暖雪	Rogue Lite/Action	PC	Y	7/22/2021	BanHao Approved	Public testing on Aug 4																		
Nofand	诺弗兰物语	Simulation	Mobile	Y	8/21/2020		Public testing on Aug 25																		
Burst Witch	爆裂魔女	Shooting	Mobile	Y	11/14/2019				Public testing on Oct 15																
Eternal Tree	悠久之树	RPG	Mobile	Y	7/22/2021	BanHao Approved			Public testing on Nov 24																
Vows of Heroes	终焉誓约	Card/ACG	Mobile	Y	9/29/2019			Beta testing commenced on Sep 9			Public testing on Dec 9														
Time Studio	拾光梦行	Card/ACG	Mobile	Y	10/16/2020		Alpha testing commenced			Beta testing commenced on Nov 16		Public testing on Jan 13								Server to close on 8 Aug					
Pretty Derby Umanosume	赛马娘	Card/ACG	Mobile	Overseas release													Taiwan release on 27 June	Public testing on 29 June							
Space Hunter 3	时空猎人3	Anime/Action	Mobile	Y	11/30/2020												Closed beta testing on								
<b>Game pipeline</b>																									
Gem trader	宝石研物语：伊瑟之石	Card	Mobile	Y	3/19/2021						Beta testing on 31 Mar									Beta testing on 12 July	Beta testing on 4 Aug				
Non-anonymous commands	非匿名指令	Card	Mobile	Y	7/12/2022										Closed beta testing on 7 April					BanHao Approved					
Hunting moment	狩猎时刻	Anime/action	Mobile	Y	7/29/2020						Beta testing on 20 Jan														
Chang An Bai Wai Guan	长安百丽景	Simulation	Mobile	Y	8/1/2022					Alpha testing on Dec 15											BanHao Approved				
Forge in shadow torch	暗影火炬城	Action	PC	Y	7/12/2022																BanHao Approved				
THRUD	斯露德	Card/shooting	Mobile	Y	11/5/2020									Trailer released in March											
Shining Star Shopping Street	星耀购物街	Anime/simulation	Mobile	Y	9/1/2020																				
Small flashlight party	小手电大派对	Casual	Mobile	N											Beta testing on 8 April										
Nightingale: Reverse Command	夜莺：逆向指令	Anime/RTS	Mobile	N													Beta testing on 5 May								
Guang Xi Jie Yu	光隙解语	Anime/RPG	Mobile	N						Alpha testing on Dec 31							Beta testing on 11 April				Beta testing on 18 May				
Code: Baija	代号：百家	Rouge/like/action	Mobile	N																	Beta testing commenced on 9 Aug				
RE: AETATS	重绘 阿塔提斯	MOBA	Mobile	N				Alpha test on Sep 23				Beta test on Jan 13													

Source: Company data, Goldman Sachs Global Investment Research

## Summary of Tencent and NetEase international pipelines

**Exhibit 14: Tencent now possesses a confirmed pipeline of 40+ new games dedicated to global audiences, which will be published by Level Infinite and other subsidiaries in 2022-2024E, including 20+ games for 2022 as of August, which has expanded from 10 games as of Jan.**

Entity	Title	Launch time	Platform(s)	Genre(s)	Developer(s)	Developer relation with Tencent	Publisher(s)
Level Infinite	GTF0	10-Dec-21	Win	4-player co-op action horror FPS	10 Chambers	Subsidiary	10 Chambers
	Vampire: The Masquerade - Bloodhunt	7-Sep-21	Win, PS5	Battle royale	Sharkmob	Subsidiary	Sharkmob
	SYNCE: Off-Planet	17-Sep-21	PC	Shooter	NeXT Studios	In-house	Level Infinite
	Chimerland (英雄山海)	Jan-22	Win, Mobile	MMORPG	Pixel Soft	Subsidiary	Level Infinite
	Warhammer 40,000: Darktide	30-Nov-22	Win, XSX	Action	Fatshark	Subsidiary	Fatshark
	Metal: Hellsinger	13-Sep-22	Win, PS5, XSX	Shooter	The Outsiders	Subsidiary	Funcom
	Conan Chop Chop	2022	Win, PS5, XSX	Action, adventure	Mighty Kingdom	Subsidiary	Funcom
	Avatar: Reckoning	2022	Mobile	MMO, shooting	Archosaur Games	Co-developed	Level Infinite
	The Cycle: Frontier	8-Jun-22	Win	shooting	YAGER	Subsidiary	Level Infinite
	Tower of Fantasy (幻想塔)	11-Aug-22	Mobile	MMO, CCG	Perfect World	Partner	Level Infinite
	NIKKE: The goddess of victory	2022	Mobile	CCG, shooting	SHIFT UP	Partner	Level Infinite
	Little Orpheus	Mar-22	Win, PS5, XSX, NS	Action	Sumo Group	Subsidiary	Sumo Group
	Turbo Golf	4-Aug-22	Win, XSX	Racing	Sumo Group	Subsidiary	Sumo Group
	Nightingale	2022	Win, PS5, XSX	Action, adventure	Inflexion Games	Subsidiary	Level Infinite
	VED	2022	PC	RPG	Karacian	Subsidiary	1C Entertainment
	Men of War II	2022	PC	RTS	Best Way	Subsidiary	1C Entertainment
	Hyperviolent	2022	PC	Action	Terminist Arcade	Subsidiary	1C Entertainment
	Moon Light Blade Mobile (天涯明月刀)	2022	Mobile	MMORPG	Tencent	In-house	Level Infinite, Garena
	Dune: Spice Wars	26-Apr-22	Win	4X, real-time strategy	Shiro Games	Subsidiary	Funcom
	Don't Starve: Newhome	TBA	Mobile	Survival, Sandbox, Adventure	Shengqu Games	Subsidiary	Level Infinite
Soul Frame	TBA	Win, PS5, XSX	MMORPG	Digital Extreme	Subsidiary	Digital Extreme	
Vanguard	TBA	Win, PS5, XSX	Battle royale	Remedy Entertainment	Co-developed	Level Infinite	
Riot Games	Ruined King	16-Nov-21	Nintendo Switch, PS4, XBO, Win	Role-playing	Airship Syndicate	Subsidiary	Riot Forge
	Hextech Mayhem	16-Nov-21	Nintendo Switch, Win	Rhythm	Choice Provisions	Subsidiary	Riot Forge
	Hytale	2023	TBA	Sandbox	Hypixel Studios	Subsidiary	Riot Games
	Convergence: A League of Legends Story	TBA	Win, NS, PS4, PS5, XBO, XSX	Action, platform	Double Stallion Games	Subsidiary	Riot Forge
	Song of Nunu: A League of Legends Story	TBA	Win, NS, PS4, PS5, XBO, XSX	Action-adventure	Tequila Works	Subsidiary	Riot Forge
	Project L	TBA	TBA	Fighting	Riot Games	Subsidiary	Riot Games
	Project F	TBA	TBA	Action role-playing	Riot Games	Subsidiary	Riot Games
World of Runeterra	TBA	TBA	MMORPG	Riot Games	Subsidiary	Riot Games	
Supercell	Clash Quest	TBA	Mobile	Strategy, turn-based battle	Supercell	Subsidiary	Supercell
	Everdale	23-Aug-21	Mobile	village-building	Supercell	Subsidiary	Supercell
	Clash Mini	8-Nov-21	Mobile	Strategy, board game	Supercell	Subsidiary	Supercell
	Clash Heroes	TBA	Mobile	Action	Supercell	Subsidiary	Supercell
Epic Games	Aian Wake Remastered	5-Oct-21	Win, PS4, XBO, PS5, Xbox XS	Horror	Remedy Entertainment	Associates	Epic Games Publishing
	Rocket League Sideswipe	2-Dec-21	iOS, Android	Racing	Psyonix	Associates	Epic Games
	Fortnite Chapter 3	7-Dec-21	PlayStation, Xbox, and PC	Battle Royale, shooting	Epic Games	Associates	Epic Games
	Rumbleverse	15-Feb-22	PlayStation, Xbox, and PC	Battle Royale	Iron Galaxy Studios	Co-operated	Epic Games
	Aian Wake 2	2023	Win, PS4, XBO, PS5, Xbox XS	Horror	Remedy Entertainment	Co-operated	Epic Games Publishing
The Matrix Awakens	TBA	PS5 and Xbox Series XS	Open-world, action	Epic Games	Co-operated	Epic Games	
Other PC & console	MEDIUM	28-Jan-21	Win, PS5, XBO	Horror	Bloober Team	Subsidiary	Bloober Team
	Hood: Outlaws & Legends	10-May-21	Win, Nintendo Switch, PS4, XBO	Action	Sumo Digital	Subsidiary	Focus Home Interactive
	Gnifflands	1-Jun-21	Win, Nintendo Switch, PS4, XBO	Roguelike, RPG	Klei Entertainment	Subsidiary	Klei Entertainment
	CROWZ: Squad Operation	13-Nov-21	Win	Shooting	Royal Crow	Subsidiary	THUMBAGE
	V Rising	5/17/2022	Win	Action, RPG	Stunlock Studios	Subsidiary	Stunlock Studios
	Wanted: Dead	4Q22	Win, PS5, XBO	Shooting	Wake Up Interactive	Subsidiary	110 Industries
	Vengeance is Mine	2023	Win, PS5, XBO	Action	Wake Up Interactive	Subsidiary	110 Industries
	Layers of Fears	2023	Win, PS5, XBO	Horror	Bloober Team	Subsidiary	Bloober Team
	Path Of Exile 2	2024	Win, PS5, XBO	MMORPG	Grinding Gear Games	Subsidiary	Grinding Gear Games
	Little Devil Inside	TBA	Win, NS, PS4, PS5, XBO	Action role-playing	Neostream Interactive	Subsidiary	Neostream Interactive
	Project N1	TBA	Win	MMORPG	Nyou	Subsidiary	Nyou
	Project EDO	TBA	Win, PS5, XBO	Battle Royale, ninja	Wake Up Interactive	Subsidiary	110 Industries
	Un-named new project	TBA	Win, PS5, XBO	Sci-fi, shooting	Splash Damage	Subsidiary	Leyou Technologies
Other mobile	Order Zero	Sep-21	Mobile	Shooting, ACG	IKINA Games	Subsidiary	IKINA Games
	Galaxy Tales: Story of Rapunzel	Jan-22	Mobile	Action	IKINA Games	Subsidiary	IKINA Games
	Story of Seasons	2022	Mobile	Simulation	NeXT Studio	In-house	Level Infinite
	Un-named new project	TBA	Mobile	Open-world, Shooting	YAGER	Subsidiary	YAGER
Developed by Tencent	Apex Legends Mobile	31-May-22	Mobile	Battle royale	Tencent	Co-developed	Electronics Arts

Source: Company data, data compiled by Goldman Sachs Global Investment Research

**Exhibit 15: NetEase has a pipeline of over 7 international games in 2022, with the next meaningful contributor likely to be Harry Potter Japan, though the launch date has not been confirmed yet.**

Game	Genre	Release date	Region
<i>Naraka: Bladepoint mobile</i>	Battle Royale	2023	Worldwide
<i>Naraka: Bladepoint console</i>	Battle Royale	2022	Worldwide
<i>Harry Potter: Magic Awakened</i>	MMORPG	4Q22	Japan, Korea, ASEAN
<i>Lost Light</i>	FPS	8/31/2022	Worldwide
<i>Dead by Daylight Mobile</i>	Horror	4/28/2022	Asia
<i>The Lord of the Rings: Rise to War</i>	SLG	4/15/2022	Japan, Korea, Macau, Hong Kong, Taiwan
<i>Vikingard</i>	MMORPG	3/21/2022	Canada, United States, France, Germany, United Kingdom, Australia
<i>Revelation</i>	MMORPG	10/4/2021	Korea
<i>Harry Potter: Magic Awakened</i>	MMORPG	9/9/2021	Mainland China, Macau, Hong Kong, Taiwan
<i>The Lord of the Rings: Rise to War</i>	SLG	9/6/2021	Worldwide
<i>Genesis Masterwork Apocalypse</i>	CCG	7/28/2021	Japan, Taiwan
<i>MARVEL Duel</i>	CCG	7/22/2020	Hong Kong, Thailand, Malaysia
<i>X2: Eclipse</i>	CCG	7/1/2021	Korea
<i>Neko Crush</i>	Simulation	6/26/2021	United States, Thailand
<i>Onmyoji: Kindergarten</i>	CCG	5/21/2021	Japan
<i>Murderous Pursuits</i>	Action	4/30/2020	Thailand, Singapore, Canada, Taiwan
<i>Flower and Sword</i>	MMORPG	4/24/2020	Canada, Singapore, Malaysia, Australia, United Kingdom, Thailand, Korea, Germany, France, Vietnam, Hong Kong
<i>Infinite Lagrange</i>	SLG	4/21/2021	USA, Germany, Japan
<i>Onmyoji: The Card Game</i>	CCG	9/21/2020	Japan, Thailand, Hong Kong

Source: Company data, Goldman Sachs Global Investment Research

### Target Price, TP Methodology and Risks

**Tencent:** Our 12-month SOTP-based target price is **HK\$503**, implying 69% upside. We are Buy-rated. Downside risks: More intense industry competition in performance-based advertising, unexpected delay in game launches/Banhao approvals, more intense competition in long-form video with larger margin drag, slower-than-expected growth in FinTech and Cloud businesses, reinvestment risk, and technical selling pressure from Prosus.

**NetEase:** Our 12-month SOTP-based target prices of **US\$120/HK\$187** for NTES/9999.HK, imply 33%/35% upside. We are Buy-rated on NTES/9999.HK. Downside risks: Weaker performance of legacy games; slower-than-expected monetization ramp-up of new games; more intensive competition in games, e-commerce, education and other business areas.

**Bilibili:** Our 12-month DCF-based target prices of **US\$28/HK\$219** (WACC of 15% and terminal growth rate of 3%) imply 20%/17% upside. We are Neutral rated on BILI/9626.HK. Upside risks: 1) Further growth in time spent share; 2) Stronger online game revenue growth; 3) Progress on cost-cutting initiatives. Downside risks: 1) Intensified competition for user time spent from other entertainment contenders, notably from short-form video companies; 2) Weaker-than-expected game grossing and pipeline due to Banhao suspension; 3) Losses continue if content costs/revenue sharing does not fall as a percentage of revenue.

## South Korea: Focus on downward stabilization of relatively new games

**NCSOFT (036570.KS), Netmarble (251270.KS), Krafton (259960.KS) and Pearl Abyss (263750.KQ) are covered by Eric Cha.**

**Korea:** With key game launches slated toward the latter part of the year, we believe the main debates around the companies will be **product life cycle management** for existing games before new games kick in and incremental data (i.e. exact launch date, pre-launch marketing activities, details on business model) on the upcoming blockbuster games before their launch.

- **For NCSOFT** specifically, we believe the revenue trajectory of *LW* and *LM* will be key drivers of earnings while investors will be mostly looking for more details around *TL* launch in 4Q (key interest around specific business model). We expect *LW* (Region 1, launched Nov 2021) to sequentially decline by c.40% in 2Q22 as we observe *LW Korea* grossing rankings have been competing shoulder to shoulder with *LM* throughout 2Q, whereas we had expected *LW* to remain a solid #1. In Taiwan, *LW* has maintained robust #1 grossing ranking throughout 2Q.
- **For Krafton**, we expect *PUBG* franchise mobile revenue will drive near term earnings but the main event for the year will likely be the launch of *Callisto Protocol*, which recently set its launch date to Dec 2, 2022, improving visibility for the pipeline. With 2Q22 being a relatively weak season, we expect mobile revenue to decline (-11% YoY, 21% QoQ), which should drive an 18% sequential decline for the overall top line (-7% YoY) accordingly. Mostly driven by QoQ decline in top line, OP will also decline sequentially, W160bn on our estimate.
- **For Pearl Abyss**, we believe investor expectations are likely low on **BDM China** being a turnaround title given the lukewarm datapoints thus far post its Apr launch, and we also think there could be some risk of game launch delay around *Crimson Desert* (current expectation of 4Q22 launch). The most imminent launch would be *Black Clover Mobile* (RPG, Korea/Japan), which we expect to be launched in 3Q22 (GSe).
- **For Netmarble**, which saw an OP loss in 1Q, we believe key debates for the short term would be on its top line recovery through new game launches - namely, *Cross Worlds*' global launch (May 25) and *Seven Knights Revolution Korea* launch (July 28).

### Target Price, TP Methodology and Risks

**NCSOFT:** We maintain our Neutral rating on NCSOFT with a 12m TP of W430,000, based on 20x target P/E to NTM+1Y EPS of W21,684. For the short-term, product life cycle management of existing major mobile games (i.e. *LM*, *L2M*, *LW*) pose as both upside and downside risk to earnings, in our view. Additional downside risk may come from delay in key game launch (*TL* is currently slated for launch towards 2022 year-end), while better-than-expected performance from *TL* could result in earnings upside as well as re-rating for the stock with other games in the pipeline could be perceived as having higher hit ratio in the overseas market.

**Netmarble:** We maintain our Sell rating on Netmarble with an SOTP-based 12m TP of W82,000. This implies target NTM+1Y (2023E) P/E of 22x, compared to global peer average (excl Netmarble) of 20x. Upside risks: 1) A more resilient revenue performance from *BSR* and *L2R* would provide meaningful upside risk to our earnings; 2) as we are bearish on the company owing to its dependence on external IP games, meaningful successes from self-developed games would provide upside risk to revenue as well as our OP margin assumptions; 3) meaningful increase in the value of investment assets would provide upside risk to Netmarble's SOTP valuation.

**Krafton:** We maintain our Sell rating on Krafton with a 12m TP of W210,000, based on 18x target P/E (10% discount on global peer average excluding Krafton) applied to NTM+1Y EPS of W11,464. Key upside risks include better-than-expected product life cycle management for *PUBG* and better-than-expected performance from *The Callisto Protocol*, which could subsequently lead to re-rating of the stock, on top of earnings upside.

**Pearl Abyss:** We maintain a Neutral rating with a 12m target price of W65,000, based on 18x target P/E (global peer average) applied to NTM+1Y EPS of W3,628. Upside risks include better-than-expected performance from *BDM China*, *Black Clover*, *CD*, *DokeV* etc., better product life cycle management of existing IP, a more recurring revenue stream from venture capital subsidiary, further multiple expansion from portfolio diversification and metaverse/NFT development. Downside risks include softer-than-expected *BDM* revenue from overseas, which could arise from differences in user behavior regarding in-game item sales or from potentially intensifying competition from other Korean developers. Delays in the game launch schedule could also weaken investment sentiment. Other risks include weaker-than-expected performance of new pipelines (e.g., *CD*, *DokeV*, *PLAN 8* etc.).



Exhibit 16: South Korean mobile game publishers: worldwide grossing by player snapshot

Korea		Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
<b>Netmarble Games Corp.</b> 251270.KS								
<b>YoY% - local currency</b>		-19%	-21%	-34%	20%	42%	-14%	1%
<b>2-Yr CAGR% - local currency</b>		2%	2%	-10%	2%	4%	1%	5%
Grossing % yoy - by titles								
The Seven Deadly Sins: Grand Cross	七つの大罪 光と闇の交戦 : グラクロ	-38%	-73%	-78%	-72%	-40%	-55%	-44%
Cash Frenzy™ - Casino Slots	Cash Frenzy™ - Casino Slots	-18%	-20%	-26%	-26%	-26%	-21%	-21%
Jackpot World™ - Slots Casino	Jackpot World™ - Slots Casino	56%	49%	53%	50%	38%	24%	4%
Marvel Contest of Champions	Marvel Contest of Champions	-45%	-21%	-51%	-41%	-38%	-41%	-31%
Lotsa Slots - Casino Games	Lotsa Slots - Casino Games	-2%	0%	-1%	-4%	-2%	0%	4%
<b>Global Market share %</b>		1.5%	1.3%	1.1%	1.9%	2.0%	2.0%	2.1%
Market share % - by titles								
The Seven Deadly Sins: Grand Cross	七つの大罪 光と闇の交戦 : グラクロ	0.3%	0.1%	0.1%	0.1%	0.3%	0.2%	0.2%
Cash Frenzy™ - Casino Slots	Cash Frenzy™ - Casino Slots	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Jackpot World™ - Slots Casino	Jackpot World™ - Slots Casino	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Marvel Contest of Champions	Marvel Contest of Champions	0.2%	0.2%	0.2%	0.3%	0.2%	0.2%	0.4%
Lotsa Slots - Casino Games	Lotsa Slots - Casino Games	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
<b>NCSOFT</b> 036570.KS								
<b>YoY% - local currency</b>		61%	82%	108%	25%	26%	13%	23%
<b>2-Yr CAGR% - local currency</b>		5%	5%	10%	23%	19%	14%	8%
Grossing % yoy - by titles								
Lineage W	리니지W	0%	0%	0%	0%	0%	0%	0%
Lineage M	리니지M	-56%	-50%	-29%	2%	-22%	7%	0%
Lineage 2M	리니지2M	-55%	-48%	-41%	-77%	-73%	-72%	-69%
Lineage 2M - Japan	리네ージュ2M (Lineage2M)	0%	0%	24%	-57%	-55%	-46%	-46%
Blade & Soul	블레이드&소울2	0%	0%	0%	0%	0%	0%	0%
<b>Global Market share %</b>		2.2%	2.3%	2.3%	2.0%	1.8%	1.8%	1.7%
Market share % - by titles								
Lineage W	리니지W	1.2%	1.3%	1.3%	1.0%	1.0%	0.6%	0.6%
Lineage M	리니지M	0.4%	0.5%	0.5%	0.6%	0.5%	0.8%	0.8%
Lineage 2M	리니지2M	0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%
Lineage 2M - Japan	리네ージュ2M (Lineage2M)	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Blade & Soul	블레이드&소울2	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%
<b>NEXON Company</b>								
<b>YoY% - local currency</b>		-21%	-18%	30%	79%	49%	26%	38%
<b>2-Yr CAGR% - local currency</b>		7%	3%	24%	31%	11%	-12%	-17%
Grossing % yoy - by titles								
DnF Mobile	던전앤파이터 모바일	0%	0%	0%	0%	0%	0%	0%
Maplestory M	메이플스토리M	-3%	-4%	8%	23%	18%	3%	-18%
FIFA ONLINE 4 M by EA SPORTS™	FIFA ONLINE 4 M by EA SPORTS™	18%	23%	156%	148%	51%	62%	79%
KartRider Mobile	카트라이더 러쉬플러스	-1%	-5%	-1%	-3%	-2%	-3%	-3%
FIFA Mobile	피파모바일	9%	39%	57%	5%	2%	9%	38%
<b>Global Market share %</b>		0.8%	0.7%	0.9%	1.1%	1.0%	0.8%	0.8%
Market share % - by titles								
DnF Mobile	던전앤파이터 모바일	0.0%	0.0%	0.2%	0.4%	0.3%	0.2%	0.3%
Maplestory M	메이플스토리M	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%
FIFA ONLINE 4 M by EA SPORTS™	FIFA ONLINE 4 M by EA SPORTS™	0.1%	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%
KartRider Mobile	카트라이더 러쉬플러스	0.1%	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%
FIFA Mobile	피파모바일	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%	0.1%
<b>Pearl Abyss Corp.</b> 263750.KS								
<b>YoY% - local currency</b>		-45%	-45%	-80%	-16%	-34%	-41%	-49%
<b>2-Yr CAGR% - local currency</b>		-45%	-45%	-46%	-47%	-49%	-48%	-49%
Grossing % yoy - by titles								
Black Desert Mobile	검은사막 모바일	-49%	-49%	-36%	-10%	-32%	-45%	-52%
<b>Global Market share %</b>		0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%
Market share % - by titles								
Black Desert Mobile	검은사막 모바일	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

Source: SensorTower, data compiled by Goldman Sachs Global Investment Research



## ASEAN: *Free Fire* still the largest battle royale, but continues to drift lower on a yoy (%) basis with weakness seen across countries

### ***Sea Limited (SE) is covered by Pang Vittayaamnuykoon***

**SEA:** At Garena, we believe **1)** the stabilizing of ***Free Fire's* grossing** following the post-Covid fatigue and **2)** more visibility on **pipeline** continue to serve as the key catalysts for Sea. In the past a few months, we find encouraging the stabilized user engagement since March, with ***Free Fire+Free Fire Max* MAU edged up** on MoM basis in **July**, manifesting the effectiveness of Garena's proactive moves in refreshing contents and incentivizing time spent. However, **grossing remains weak** heading into 3Q22, as Garena intentionally slowed monetization to retain users. We expect Garena to increase monetization at a paced schedule post the recovery of user engagement, and hence **grossing to bottom in 3Q22**. In terms of profitability, we expect **EBITDA margin to remain under pressure** for the following quarters in 2022 as Garena is committed to investing into the *Free Fire* franchise while enhancing its pipeline. In the longer term, we believe the title is likely to follow MOBA's path and see potential for revenue to be reinvigorated with operational efforts. Meanwhile, Garena started publishing the sandbox game platform ***Blockman Go*** globally from July 5 in regions including Indonesia, Brazil and Thailand, and launched the 3rd round testing of ***Alpha Ace*** in June as a publisher. Despite at a nascent stage, it has shed light on the company's potential to diversify their game portfolio especially post the fatigue at *Free Fire*.

### **Free Fire**

- Based on SensorTower, ***Free Fire* revenue decline stabilized at -c.45% yoy** in the last a few months, with weakness across countries including USA, India, Brazil, Indonesia and Thailand. Note that, revenue from SensorTower does not include the portion of revenue that Garena generated through off platform top up. **Downloads picked up sequentially in July** post the weakness in June, with robust momentum observed in Brazil, Indonesia, Mexico and Columbia. That said, *Free Fire* remains the top title in the battle royale / FPS genre. In Brazil, Mexico, Thailand and Indonesia, ***Free Fire* is still the largest battle royale / FPS game ranking above both *Call of Duty* mobile and *PUBG*.**
- **Garena is committed to investing in its *Free Fire* franchise.** According to SocialPeta, it has topped the **traffic acquisition spending list** among non-mainland China mobile games at Andorid devices in June, primarily spending in the U.S., Vietnam and Pakistan market in the month.
- ***Free Fire* has been rejuvenating the franchise with upgraded visual design.** They recently unveiled a new logo featuring a more modern and dynamic look with the key details players are familiar with retained. They also updated the UI with new layout for mode selection and mission pages.
- To celebrate its **fifth anniversary**, *Free Fire* unveiled its plan to host the first in-game performance collaborating with popular artists in August. It will also bring back popular themed content, exclusive rewards and giveaways during the celebration

event.

### **Blockman Go**

- Garena launched the game globally in **July** in 5 regions including **Indonesia, Brazil and Thailand**. The game resembles *Minecraft* and *Roblox* and is uniquely optimized to be compatible with lower end smartphones.
- Since first being launched in 2017, **grossing** has been healthy as per SensorTower, reaching **US\$500k** per month at a peak level, despite weakening upon Post-Covid reopening. **Downloads** are also **strong** particularly with the version updates earlier this year. Total downloads have surpassed **100mn**, with most contributions from Brazil, Vietnam and Indonesia. For context, Roblox recorded US\$631mn total bookings as of 1Q22 with bookings per DAU at US\$11.67.

### **Arena of Valor**

- **Net Revenue growth (yoy)** increased sequentially in July, while downloads growth marginally softened compared with 2Q/1Q 2022. We note multiple collaborations with popular animation IPs in the last quarter, including **Ultraman** skins released in June 2022. Also in July, Garena launched update patch with new revamped hero Helen, battlefield changes and core game-play improvements. By country, for downloads we see stronger yoy growth momentum in Indonesia, Singapore and Thailand, while on revenue Malaysia, Hong Kong and Philippine led the growth.

### **Moonlight Blade**

- Garena entered full launch of PC and mobile **Moolight Blade** on August 2 in Thailand. Previously, 1.2mn players showed interest in pre-registration. We note that Garena's *Moonlight Blade* global grossing (excl. mainland China) has dipped sequentially in June/July vs. earlier this year.

### **Acquisition of VIC Game Studios**

As reported on [July 27](#), a South Korean game developer, **VIC Game Studio (VIC)**, closed a funding worth c.US\$27mn led by Garena. VIC was founded in 2020 by key personnel that produced **The Seven Deadly Sins: Grand Cross**, a blockbuster animation IP-based mobile RPG title. They are currently focused on promoting a number of new games, including another animation IP-based title **Black Clover Mobile**. It is scheduled to be released in 2022 and has recorded 283k pre-registrations on TapTap.

### **Target Price, TP Methodology and Risks**

**Maintain Buy on SE** as we continue to view Sea as a winner in the fast-growing gaming, ecommerce and digital finance markets in Asia, and we expect further upside from its successful move into LATAM. Our 12-month SOTP-based TP remains unchanged at US\$176.

**Key risks:** 1) Competition from global peers; 2) macroeconomic and geopolitical risks and exchange rate volatility; 3) execution in new markets e.g. LATAM/India; 4) inability to derive synergies from all three businesses.

Exhibit 17: ASEAN mobile game publishers: worldwide grossing by player snapshot

ASEAN								
SEA/Garena Games Online		Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
<b>YoY% - global</b>		-9%	-17%	-22%	-32%	-48%	-48%	-45%
<b>2-Yr CAGR% - global</b>		22%	23%	20%	5%	-4%	-8%	-10%
<b>Grossing % yoy - by titles</b>								
Garena Free Fire	Garena Free Fire	-13%	-19%	-23%	-37%	-54%	-53%	-47%
Garena Arena of Valor	Garena Arena of Valor	31%	13%	-1%	10%	9%	14%	17%
Garena Moon Light Blade	天涯明月刀 M - Garena	0%	0%	0%	0%	0%	0%	-100%
<b>Global Market share %</b>		1.3%	1.3%	1.2%	1.0%	1.1%	1.0%	1.0%
<b>Market share % - by titles</b>								
Garena Free Fire	Garena Free Fire	1.0%	1.0%	1.0%	0.8%	0.8%	0.8%	0.8%
Garena Arena of Valor	Garena Arena of Valor	0.1%	0.2%	0.1%	0.1%	0.2%	0.2%	0.2%
Garena Moon Light Blade	天涯明月刀 M - Garena	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: SensorTower, data compiled by Goldman Sachs Global Investment Research

# Japan mobile game grossings by publisher

Exhibit 18: Japanese mobile game publishers: worldwide grossing by player snapshot

Japan		Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
<b>YoY% - domestic Japan (constant FX)</b>		-12%	-7%	-9%	-4%	0%	5%	9%
<b>YoY% - domestic Japan (US\$)</b>		-20%	-15%	-18%	-17%	-15%	-15%	-10%
<b>BANDAI NAMCO Entertainment 7832.T</b>								
<b>YoY% - local currency</b>		-46%	-36%	-45%	-37%	26%	104%	23%
<b>2-Yr CAGR% - local currency</b>		-17%	-23%	-27%	-23%	-3%	-5%	-1%
Grossing % yoy - by titles								
ONE PIECE Treasure Cruise	ONE PIECE トレジャークルーズ	-5%	-20%	-2%	0%	67%	16%	-1%
DRAGON BALL LEGENDS	DRAGON BALL LEGENDS	-2%	-5%	-5%	-3%	10%	-1%	67%
ONE PIECE Bounty Rush-Action Game	ONE PIECE バウンティラッシュ - アクション	10%	44%	-2%	16%	21%	22%	98%
That Time I Got Reincarnated as a Slime	転生したらスライムだった件 魔王と異世界	0%	0%	0%	0%	0%	0%	0%
The Idolmaster: Cinderella Girls Starlight	アイドルマスター シンデレラガールズ	16%	-2%	5%	-1%	-10%	-1%	-1%
<b>Global Market share %</b>		1.3%	1.4%	0.9%	0.9%	1.7%	1.7%	2.5%
Market share % - by titles								
ONE PIECE Treasure Cruise	ONE PIECE トレジャークルーズ	0.2%	0.1%	0.1%	0.1%	0.4%	0.1%	0.1%
DRAGON BALL LEGENDS	DRAGON BALL LEGENDS	0.3%	0.2%	0.3%	0.2%	0.2%	0.6%	0.5%
ONE PIECE Bounty Rush-Action Game	ONE PIECE バウンティラッシュ - アクション	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%	0.2%
That Time I Got Reincarnated as a Slime	転生したらスライムだった件 魔王と異世界	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
The Idolmaster: Cinderella Girls Starlight	アイドルマスター シンデレラガールズ	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
<b>CyberAgent 4751.T</b>								
<b>YoY% - local currency</b>		60%	51%	-29%	-44%	-26%	-32%	-21%
<b>2-Yr CAGR% - local currency</b>		27%	35%	24%	15%	32%	6%	13%
Grossing % yoy - by titles								
Uma Musume Pretty Derby	ウマ娘 プリティーダービー	0%	18%	-1%	-5%	-2%	-2%	-3%
Princess Connect! Re: Dive	プリンセスコネクト! Re:Dive	-2%	-3%	-6%	-4%	2%	-2%	5%
BanG Dream! Girls band party!	バンドリ! ガールズバンドパーティ!	0%	-6%	5%	3%	-3%	5%	-5%
Shadowverse	シャドウバース (Shadowverse)	-4%	6%	11%	-10%	-5%	2%	2%
A blessing to this wonderful world!	この素晴らしい世界に祝福を! ファン	0%	5%	4%	5%	-1%	4%	3%
<b>Global Market share %</b>		1.5%	1.5%	1.8%	1.1%	1.2%	1.1%	1.3%
Market share % - by titles								
Uma Musume Pretty Derby	ウマ娘 プリティーダービー	1.1%	1.0%	1.3%	0.8%	0.9%	0.8%	1.3%
Princess Connect! Re: Dive	プリンセスコネクト! Re:Dive	0.2%	0.3%	0.1%	0.1%	0.1%	0.1%	0.1%
BanG Dream! Girls band party!	バンドリ! ガールズバンドパーティ!	0.1%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%
Shadowverse	シャドウバース (Shadowverse)	0.0%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%
A blessing to this wonderful world!	この素晴らしい世界に祝福を! ファン	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>SQUARE ENIX 9684.T</b>								
<b>YoY% - local currency</b>		-25%	-26%	-32%	-30%	-18%	5%	22%
<b>2-Yr CAGR% - local currency</b>		4%	-1%	-1%	-1%	-1%	0%	4%
Grossing % yoy - by titles								
Dragon quest walk	ドラゴンクエストウォーク	-33%	-29%	-29%	-37%	-33%	-23%	15%
Dragon Quest Tact	ドラゴンクエストタクト	-7%	-26%	-33%	26%	25%	-14%	1%
FFBE Phantom War WAR OF THE VISIONS	FFBE幻影戦争 WAR OF THE VISIONS	-68%	-65%	-44%	-79%	-59%	-4%	-68%
Romancing SaGa Re: Universe	ロマンシング サガ リ・ユニバース	6%	-3%	-44%	-33%	-62%	-10%	-6%
Holy Sword Legend ECHOES of MANA	聖剣伝説 ECHOES of MANA	0%	0%	0%	0%	0%	0%	0%
<b>Global Market share %</b>		1.7%	1.4%	1.2%	1.2%	1.3%	1.4%	1.6%
Market share % - by titles								
Dragon quest walk	ドラゴンクエストウォーク	0.5%	0.3%	0.5%	0.4%	0.4%	0.4%	0.5%
Dragon Quest Tact	ドラゴンクエストタクト	0.4%	0.2%	0.2%	0.2%	0.2%	0.1%	0.3%
FFBE Phantom War WAR OF THE VISIONS	FFBE幻影戦争 WAR OF THE VISIONS	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.0%
Romancing SaGa Re: Universe	ロマンシング サガ リ・ユニバース	0.3%	0.2%	0.1%	0.2%	0.1%	0.3%	0.2%
Holy Sword Legend ECHOES of MANA	聖剣伝説 ECHOES of MANA	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
<b>Konami 9766.T</b>								
<b>YoY% - local currency</b>		-23%	16%	-6%	10%	-17%	-14%	-10%
<b>2-Yr CAGR% - local currency</b>		14%	29%	5%	13%	-11%	-12%	-4%
Grossing % yoy - by titles								
Yugioh Master Duel	遊戯王 マスターデュエル	0%	0%	0%	0%	0%	0%	0%
Jikkyō Powerful Pro Yakyū	実況パワフルプロ野球	-23%	-30%	-15%	-39%	-25%	31%	-29%
Yu-Gi-Oh! Duel Links	Yu-Gi-Oh! Duel Links	-27%	-62%	-59%	-60%	-65%	-67%	-58%
eFootball™ウイコレ CHAMPION SQUAD	eFootball™ウイコレ CHAMPION SQUAD	13%	28%	3%	19%	7%	21%	57%
Live powerful soccer	実況パワフルサッカー	-29%	-19%	-22%	14%	45%	43%	-11%
<b>Global Market share %</b>		1.5%	1.8%	1.4%	1.4%	1.0%	1.1%	1.2%
Market share % - by titles								
Yugioh Master Duel	遊戯王 マスターデュエル	0.1%	0.6%	0.3%	0.2%	0.2%	0.1%	0.1%
Jikkyō Powerful Pro Yakyū	実況パワフルプロ野球	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Yu-Gi-Oh! Duel Links	Yu-Gi-Oh! Duel Links	0.5%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
eFootball™ウイコレ CHAMPION SQUAD	eFootball™ウイコレ CHAMPION SQUAD	0.1%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%
Live powerful soccer	実況パワフルサッカー	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: SensorTower, data compiled by Goldman Sachs Global Investment Research



# Disclosure Appendix

## Reg AC

We, Lincoln Kong, CFA, Ronald Keung, CFA, Eric Cha, Pang Vittayaamnuaykoon and Steve Qiu, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

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## Target price history table(s)

### Pearl Abyss Corp. (263750.KQ)

Date of report	Target price (W)
12-May-22	65,000
17-Feb-22	113,000
25-Aug-21	104,000
31-Jul-21	110,000
28-Apr-21	97,000
16-Feb-21	490,000
21-Jan-21	350,000

### NCSOFT Corp. (036570.KS)

Date of report	Target price (W)
31-Jul-22	430,000
15-May-22	480,000
21-Feb-22	460,000
25-Jan-22	880,000
11-Nov-21	1,010,000
04-Nov-21	970,000
02-Nov-21	920,000
30-Aug-21	960,000
11-Aug-21	1,260,000
15-Jul-21	1,220,000
10-May-21	1,200,000
29-Mar-21	1,190,000
03-Jan-21	1,260,000
16-Nov-20	1,060,000
21-Oct-20	1,040,000
13-Aug-20	850,000

### Netmarble Corp. (251270.KS)

Date of report	Target price (W)
25-Apr-22	82,000
21-Feb-22	83,000
28-Apr-21	68,000
11-Nov-20	64,000
12-Aug-20	62,000

### Krafton (259960.KS)

Date of report	Target price (W)
03-Aug-22	210,000
10-Feb-22	220,000
12-Jan-22	400,000
05-Dec-21	480,000

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