

Neutral

# Bilibili Inc. (BILI)

## Quantifying ‘Story Mode’, potential upside on 2H ads; 2Q preview; Neutra

<b>BILI</b>	12m Price Target: <b>\$29.00</b>	Price: <b>\$25.21</b>	Upside: <b>15.0%</b>
<b>9626.HK</b>	12m Price Target: <b>HK\$226.00</b>	Price: <b>HK\$198.50</b>	Upside: <b>13.9%</b>

**Bilibili** remains as one of China’s fastest growing online entertainment platforms on both user engagement (timespent) and monetization (revenue/DAU) in 2022-24E, with emerging signs of sequential gross/operating margin improvement. **Ahead of its results (likely in early-Sept)**, we revisit our estimates for 2Q22E - likely an uneventful quarter with: **1) revenue growth** of 10% yoy to Rmb4.9bn, on performance ad share gain following new ad customer acquisition (game vertical) amid changes in advertising policy, despite weaker VAS subscription and soft mobile game grossing; **2) net loss of Rmb1.9bn** in 2Q22E and gradually reduced losses in 2H22E with further improvement from contained revenue sharing costs and S&M expenses.

**Evolving themes: 1) Engagement to consistently outperform short-form video, or SFV**, (both Douyin and Kuaishou, based on QM data) as Bilibili continues to execute towards its 400mn MAU target while its competitors are at the later cycle of the penetration curve. **2) Reorganization to pull monetization levers**, with July ads trend at 20%+ yoy run-rate, as Bilibili is changing its ad policy to unlock incremental game ad budget from both Tencent and NetEase (game P4P ad volume doubled in July vs. 1Q), while the **pure traffic-based P4P ads also achieved higher GPM%** (relative to brand/creator ads); Meanwhile, ongoing engagement **mix shift towards its short-form video function - Story Mode** (expect video views penetration to reach 50% by end-2023, from high-20s% in 2Q22) also opens up new ad inventory, which we forecast to contribute at least teens% of ad revenue by 2024E. Longer-term, Bili’s exploration of adding creator ads (Sparkle) into the story mode, and livestreaming e-commerce build up could extend its monetization runway; **3) Games remain on track** towards its 2022E

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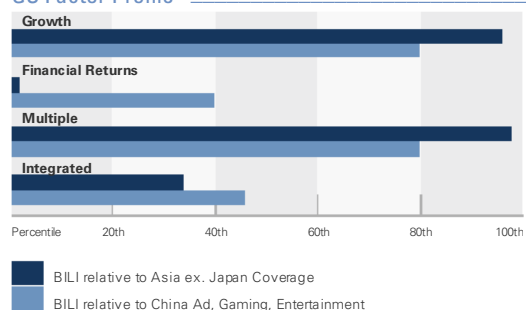
### Key Data

Market cap: \$10.0bn  
Enterprise value: \$10.9bn  
3m ADTV: \$157.2mn  
China  
China Ad, Gaming, Entertainment  
M&A Rank: 3  
Leases incl. in net debt & EV?: No

### GS Forecast

	12/21	12/22E	12/23E	12/24E
<b>Revenue (Rmb mn) New</b>	<b>19,383.7</b>	<b>22,666.5</b>	<b>30,524.0</b>	<b>38,541.2</b>
Revenue (Rmb mn) Old	19,383.7	23,030.2	31,727.1	40,405.3
EBITDA (Rmb mn)	(2,987.4)	(4,101.0)	(1,256.7)	2,100.1
<b>EPS (Rmb) New</b>	<b>(14.32)</b>	<b>(17.11)</b>	<b>(11.42)</b>	<b>(4.54)</b>
EPS (Rmb) Old	(14.32)	(18.08)	(11.87)	(4.64)
P/E (X)	NM	NM	NM	NM
P/B (X)	10.8	4.6	6.8	8.4
Dividend yield (%)	NM	NM	NM	NM
CROCI (%)	(10.1)	(14.2)	(4.8)	6.7
	<b>3/22</b>	<b>6/22E</b>	<b>9/22E</b>	<b>12/22E</b>
EPS (Rmb)	(4.20)	(4.74)	(4.33)	(3.85)

### GS Factor Profile



Source: Company data, Goldman Sachs Research estimates. See disclosures for details.

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Neutral

## Bilibili Inc. (BILI)

Rating since Feb 18, 2022

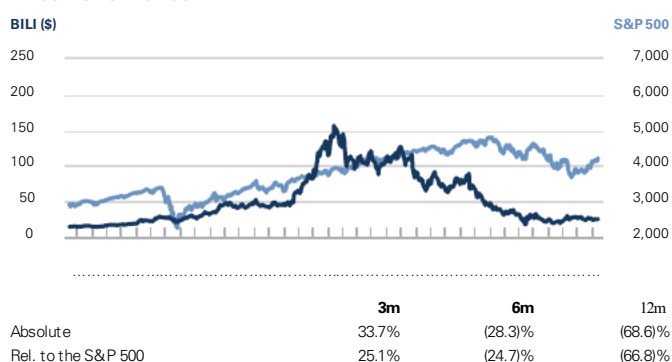
## Ratios &amp; Valuation

	12/21	12/22E	12/23E	12/24E
P/E (X)	NM	NM	NM	NM
P/B (X)	10.8	4.6	6.8	8.4
FCF yield (%)	(2.7)	(7.2)	(6.7)	(2.8)
EV/EBITDAR (X)	NM	NM	NM	32.6
EV/EBITDA (excl. leases) (X)	NM	NM	NM	32.6
CROCI (%)	(10.1)	(14.2)	(4.8)	6.7
ROE (%)	(37.4)	(37.3)	(37.1)	(20.2)
Net debt/equity (%)	51.6	43.7	18.4	(0.6)
Net debt/equity (excl. leases) (%)	51.6	43.7	18.4	(0.6)
Interest cover (X)	(34.9)	(31.0)	(20.3)	(7.8)
Days inventory outst, sales	–	–	–	–
Receivable days	22.9	24.1	24.2	25.8
Days payable outstanding	113.5	118.7	113.4	113.8
DuPont ROE (%)	(25.2)	(46.4)	(45.5)	(22.4)
Turnover (X)	0.4	0.5	0.7	0.8
Leverage (X)	2.4	3.2	4.5	5.6
Gross cash invested (ex cash) (Rmb)	36,181.9	26,281.0	29,215.8	32,921.8
Average capital employed (Rmb)	22,377.1	27,038.8	20,849.8	20,860.3
BVPS (Rmb)	56.76	36.83	25.04	20.25

## Growth &amp; Margins (%)

	12/21	12/22E	12/23E	12/24E
Total revenue growth	61.5	16.9	34.7	26.3
EBITDA growth	(189.1)	(37.3)	69.4	267.1
EPS growth	(95.2)	(19.4)	33.3	60.2
DPS growth	NM	NM	NM	NM
EBIT margin	(28.0)	(29.5)	(14.3)	(4.4)
EBITDA margin	(15.4)	(18.1)	(4.1)	5.4
Net income margin	(28.3)	(29.9)	(15.0)	(4.8)

## Price Performance



Source: FactSet. Price as of 11 Aug 2022 close.

## Income Statement (Rmb mn)

	12/21	12/22E	12/23E	12/24E
Total revenue	19,383.7	22,666.5	30,524.0	38,541.2
Cost of goods sold	(15,264.3)	(18,626.1)	(23,445.5)	(27,820.8)
SG&A	(7,025.4)	(6,979.1)	(7,529.5)	(8,279.6)
R&D	(2,523.3)	(3,738.7)	(3,925.6)	(4,121.9)
Other operating inc./exp.)	–	–	–	–
<b>EBITDA</b>	<b>(2,987.4)</b>	<b>(4,101.0)</b>	<b>(1,256.7)</b>	<b>2,100.1</b>
Depreciation & amortization	(2,441.8)	(2,576.3)	(3,120.0)	(3,781.1)
<b>EBIT</b>	<b>(5,429.3)</b>	<b>(6,677.3)</b>	<b>(4,376.6)</b>	<b>(1,681.0)</b>
Net interest inc./exp.)	(85.1)	(102.5)	(118.0)	(125.8)
Income/(loss) from associates	–	–	–	–
<b>Pre-tax profit</b>	<b>(5,412.2)</b>	<b>(6,663.8)</b>	<b>(4,494.6)</b>	<b>(1,806.8)</b>
Provision for taxes	(95.3)	(110.4)	(70.7)	(28.4)
Minority interest	19.5	2.2	–	–
Preferred dividends	0.0	–	–	–
<b>Net inc. (pre-exceptionals)</b>	<b>(5,478.0)</b>	<b>(6,772.1)</b>	<b>(4,565.3)</b>	<b>(1,835.2)</b>
Post-tax exceptionals	(1,311.2)	(1,421.8)	(1,196.4)	(1,284.1)
<b>Net inc. (post-exceptionals)</b>	<b>(6,789.2)</b>	<b>(8,193.8)</b>	<b>(5,761.8)</b>	<b>(3,119.3)</b>
<b>EPS (basic, pre-exception) (Rmb)</b>	<b>(14.42)</b>	<b>(17.11)</b>	<b>(11.42)</b>	<b>(4.54)</b>
<b>EPS (diluted, pre-exception) (Rmb)</b>	<b>(14.42)</b>	<b>(17.11)</b>	<b>(11.42)</b>	<b>(4.54)</b>
<b>EPS (basic, post-exception) (Rmb)</b>	<b>(17.88)</b>	<b>(20.70)</b>	<b>(14.41)</b>	<b>(7.72)</b>
<b>EPS (diluted, post-exception) (Rmb)</b>	<b>(17.88)</b>	<b>(20.70)</b>	<b>(14.41)</b>	<b>(7.72)</b>
DPS (Rmb)	–	–	–	–
Div. payout ratio (%)	0.0	0.0	0.0	0.0

## Balance Sheet (Rmb mn)

	12/21	12/22E	12/23E	12/24E
Cash & cash equivalents	7,523.1	12,738.3	8,210.1	6,316.9
Accounts receivable	1,382.3	1,616.4	2,425.2	3,030.5
Inventory	–	–	–	–
Other current assets	27,541.4	15,651.4	16,230.2	16,905.6
<b>Total current assets</b>	<b>36,446.9</b>	<b>30,006.2</b>	<b>26,865.5</b>	<b>26,253.0</b>
Net PP&E	1,350.3	1,854.7	2,542.8	3,229.2
Net intangibles	6,173.9	6,447.8	7,157.3	7,823.6
Total investments	5,502.5	5,502.5	5,502.5	5,502.5
Other long-term assets	2,579.6	2,716.0	2,864.1	2,997.2
<b>Total assets</b>	<b>52,053.2</b>	<b>46,527.2</b>	<b>44,932.3</b>	<b>45,805.4</b>
Accounts payable	5,560.1	6,553.8	8,009.5	9,339.6
Short-term debt	1,232.1	1,232.1	1,232.1	1,232.1
Short-term lease liabilities	–	–	–	–
Other current liabilities	5,278.8	5,884.7	7,399.4	8,777.7
<b>Total current liabilities</b>	<b>12,071.0</b>	<b>13,670.7</b>	<b>16,641.0</b>	<b>19,349.4</b>
Long-term debt	17,784.1	17,784.1	17,784.1	17,784.1
Long-term lease liabilities	–	–	–	–
Other long-term liabilities	482.0	482.0	482.0	482.0
<b>Total long-term liabilities</b>	<b>18,266.1</b>	<b>18,266.1</b>	<b>18,266.1</b>	<b>18,266.1</b>
<b>Total liabilities</b>	<b>30,337.1</b>	<b>31,936.7</b>	<b>34,907.1</b>	<b>37,615.4</b>
Preferred shares	–	–	–	–
Total common equity	21,703.7	14,578.1	10,012.8	8,177.6
<b>Minority interest</b>	<b>12.4</b>	<b>12.4</b>	<b>12.4</b>	<b>12.4</b>
<b>Total liabilities &amp; equity</b>	<b>52,053.2</b>	<b>46,527.2</b>	<b>44,932.3</b>	<b>45,805.4</b>
Net debt, adjusted	11,493.1	6,277.9	10,806.1	12,699.3

## Cash Flow (Rmb mn)

	12/21	12/22E	12/23E	12/24E
Net income	(6,808.7)	(8,196.0)	(5,761.8)	(3,119.3)
D&A add-back	2,628.9	2,576.3	3,120.0	3,781.1
Minority interest add-back	–	–	–	–
Net (inc)/dec working capital	(9.2)	3,215.0	1,582.8	1,427.7
Other operating cash flow	1,542.0	1,070.4	1,196.4	1,284.1
<b>Cash flow from operations</b>	<b>(2,647.0)</b>	<b>(1,334.2)</b>	<b>137.5</b>	<b>3,373.5</b>
Capital expenditures	(3,687.2)	(3,491.0)	(4,665.7)	(5,266.7)
Acquisitions	(522.0)	–	–	–
Divestitures	74.6	–	–	–
Others	(20,443.5)	10,040.5	–	–
<b>Cash flow from investing</b>	<b>(24,578.1)</b>	<b>6,549.5</b>	<b>(4,665.7)</b>	<b>(5,266.7)</b>
Repayment of lease liabilities	–	–	–	–
Dividends paid (common & pref)	–	–	–	–
Inc/(dec) in debt	11,203.2	–	–	–
Other financing cash flows	18,866.9	0.0	0.0	0.0
<b>Cash flow from financing</b>	<b>30,070.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Total cash flow</b>	<b>2,845.0</b>	<b>5,215.2</b>	<b>(4,528.3)</b>	<b>(1,893.2)</b>
Free cash flow	(6,334.2)	(4,825.3)	(4,528.3)	(1,893.2)

Source: Company data, Goldman Sachs Research estimates.

guidance of flat %yoy growth, as we look past the weak momentum in 2Q while quantifying the emergence of Space Hunter 3 (Rmb210mn grossing to date) and Pretty Derby TW (Rmb50mn grossing to date) in 3Q, which alongside new titles towards end-2022E, should largely offset the high yoy base from Guardian Tales (launched Apr-21) in our view.

**Key debates and events to watch: 1)** Banhao approval timeline, especially imported game approval; **2)** Potential Story Mode engagement and pace of monetization in 2H22; **3)** Key management personnel changes since July 2022 and the impact on monetization; **4)** dual primary listing in Hong Kong (scheduled in October) and potential stock connect inclusion.

**What to do with the stock:** We cut our 2022E/23E/24E revenue estimate by -2%/-4%/-5%. We now estimate yoy revenue growth rates of **17%/35%/26%**, primarily as we factor in weaker VAS subscription revenue growth from content supply constraint, partially offset by resilient advertising revenue on incremental inventory from Story Mode. The deleverage and mix change from weaker games drives our GPM to 18%/23%/28%. With that, our 2022E/23E/24E net margin changes +1.2ppts/0pts/-0.1ppts, as we also factor in **1)** higher R&D spending on new game studio acquisition; partly offset by **2)** more disciplined S&M spending on user acquisition **3)** better control of revenue sharing costs.

With our revised estimates, our 12-month DCF-based target prices for BILI (ADS)/9626.HK rise by 4%/3% to **US\$29/HK\$226** from US\$28/HK\$219 (15%/3% WACC/terminal growth rate unchanged), implying 11% upside / 6% downside. We maintain our **Neutral** rating.

The authors would like to thank Joy (Haoyang) Yu for her contributions to this report.

#### Exhibit 1: Key changes to our 2022-24E forecasts

	New 2022E		New 2023E		New 2024E	
		% Diff.		% Diff.		% Diff.
Total revenues (Rmb mn)	22,667	-2%	30,524	-4%	38,541	-5%
Gross margin, non-GAAP	17.8%	0.8ppts	23.2%	0.1ppts	27.8%	-0.9ppts
Net margin, non-GAAP	-29.9%	1.2ppts	-15.0%	0ppts	-4.8%	-0.1ppts

Source: Goldman Sachs Global Investment Research

## Quantifying 'Story mode' and Ads upside potential

### User engagement: growth remains laser focused with incremental video views from new formats and more sophisticated algorithm

**For 2Q22E, we forecast 311mn/318mn average MAU for 2Q22E/2022E, up 31%/27% yoy** respectively, on healthy user acquisition backed by an engagement boost over the COVID lockdown periods, and improving appeal to pan-internet Gen-Z population.

### On user engagement, Bilibili emerged with a few key themes in its 2Q22-July

**2022: 1) Consistently outperforming SFV.** Bilibili’s aggregate timespent growth has outpaced that of SFV platforms including both Douyin Lite and Kuaishou Express since May-2022, with its % yoy gap further widening in recent months, given Bilibili continues to execute towards its 400mn MAU mid-term target while its competitors are at the later cycle of the user penetration curve. **2) Engagement mix shift.** Within Bilibili’s own engagement growth % mix, we see ongoing engagement mix shift towards the Story Mode (VV penetration to reach 50% by end-2023/early-2024, from high-20s% as of 2Q22).

**Exhibit 2: Bilibili: Aggregate timespent % yoy growth consistently outperforming industry and SFV since May-22**

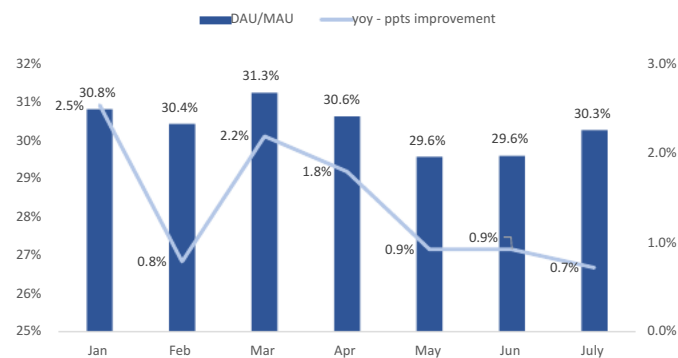
Video	Timespent % yoy	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	July VS. June- %yoy chg
Douyin 抖音		37%	29%	41%	36%	20%	16%	10%	-6%
Kuaishou 快手		2%	-3%	4%	7%	-3%	-6%	-5%	1%
Kuaishou Express 快手极速版		48%	34%	50%	54%	39%	30%	26%	-4%
Douyin Lite 抖音极速版		89%	77%	80%	65%	41%	32%	30%	-2%
iQIYI 爱奇艺		-14%	-13%	-9%	6%	-14%	-34%	-34%	0%
Tencent Video 腾讯视频		9%	0%	6%	3%	-2%	7%	11%	4%
<b>Bilibili 哔哩哔哩</b>		<b>47%</b>	<b>32%</b>	<b>55%</b>	<b>57%</b>	<b>41%</b>	<b>36%</b>	<b>39%</b>	<b>3%</b>
Xigua Video 西瓜视频		-2%	8%	13%	16%	6%	2%	8%	6%
Youku 优酷视频		-2%	-1%	1%	42%	42%	7%	23%	16%
Mango TV 芒果TV		-42%	-19%	5%	17%	14%	17%	22%	5%
<b>Total</b>		<b>20%</b>	<b>15%</b>	<b>25%</b>	<b>27%</b>	<b>13%</b>	<b>8%</b>	<b>7%</b>	<b>0%</b>
<b>% yoy - Bili vs. Douyin</b>		<b>10%</b>	<b>3%</b>	<b>14%</b>	<b>21%</b>	<b>21%</b>	<b>21%</b>	<b>29%</b>	

Video	Timespent % share	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	July VS. June- %share chg
Douyin 抖音		35%	35%	35%	35%	35%	36%	35%	-1.3%
Kuaishou 快手		19%	18%	18%	17%	17%	18%	18%	0.2%
Kuaishou Express 快手极速版		11%	11%	10%	11%	11%	11%	11%	0.5%
Douyin Lite 抖音极速版		9%	9%	10%	10%	10%	10%	10%	0.0%
iQIYI 爱奇艺		5%	5%	5%	5%	4%	4%	4%	-0.2%
Tencent Video 腾讯视频		6%	5%	5%	5%	4%	5%	5%	0.2%
<b>Bilibili 哔哩哔哩</b>		<b>4.1%</b>	<b>4.3%</b>	<b>4.1%</b>	<b>4.1%</b>	<b>4.3%</b>	<b>4.4%</b>	<b>4.6%</b>	<b>0.2%</b>
Xigua Video 西瓜视频		2%	2%	2%	2%	2%	2%	2%	0.1%
Youku 优酷视频		2%	2%	2%	2%	3%	2%	2%	0.1%
Mango TV 芒果TV		1%	2%	2%	2%	3%	2%	3%	0.4%

Source: QuestMobile

**Exhibit 3: Bilibili’s average DAU/MAU in 2022**



Source: Questmobile

**Advertising: more resilient vs. other content platform, on solid timespent increase and game ad market share gain%, as well as story mode's medium term contribution**  
**Despite the macro-driven brand advertising slowdown, we note Bilibili has managed to gain performance advertising share by changing its game ads policy,** and hence fine-tune our estimate of ads revenue to Rmb1.2bn/Rmb5.7bn for 2Q22E and 2022E, +11%/26% yoy respectively, factoring in:

- **Healthy recovery trend**, with July ad % yoy run-rate returning to **20%+**, backed by Ad market share gains in selective verticals:
  - **Game ads.** As Bilibili expands into a new cohort of game advertisers, we expect performance advertising in the game vertical to see substantial growth in 2Q22, with our monthly ad volume tracker indicating game performance ad volume share across different verticals rising from 1Q22's 15.2% to 49.6% in 2Q22, and further increase to 60.5% in July, offsetting the relatively weaker brand ads. The rapid growth is mainly due to Bilibili's change in advertising policy, as we note **in the past Bilibili only accepted game advertisers who agreed to set up jointly operated games in Bilibili app store**), while it now has lowered the criteria hence allowing **incremental game ad budget from the 2 largest Chinese game publishers, Tencent (QQ Speed, Weixin IAA games) and NetEase (FWJ, Diablo).**
  - **E-commerce ad.** As Bilibili further captured ad budget share during the June shopping festival season.
  - **F&B ads**, backed by unique value proposition of native ads
- **Brand ads** to be more impacted by Covid/macro than performance ads, and also have a slower recovery path due to its longer value chain including budgeting, content design and production.

**Exhibit 4: We note that Bili has added more game ads clients since 2022**

Bilibili: Screenshot of incremental ad inventory from game verticals



1) Bilibili has opened a new cohort of game advertising client since 2Q22 ( e.g. NetEase' FWJ mobile ad showcased as a banner ad on Bili's app)

2) Story Mode offers additional timespent /ad inventories (e.g. NetEase' Diablo Immortal featured as feed ads in Bili's Story Mode)



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

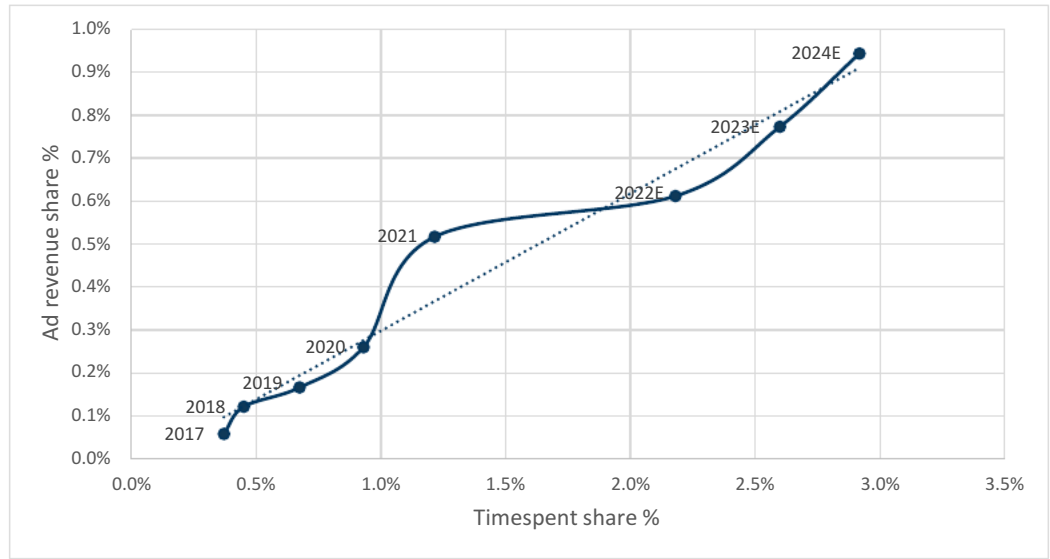
Exhibit 5: Bilibili performance ads: Volume exposure by vertical

		1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	July 22
文化娱乐	Entertainment	38.0%	29.8%	24.5%	17.0%	47.8%	15.6%	14.8%
游戏	Games	18.9%	17.8%	18.6%	17.9%	15.2%	49.6%	60.5%
医药保健	Healthcare	3.4%	4.2%	1.4%	0.2%	0.1%	0.3%	0.3%
社交婚恋	Social Network	3.3%	4.7%	5.5%	3.5%	1.8%	1.3%	5.2%
教育培训	Education	3.0%	6.8%	4.1%	2.9%	4.5%	1.6%	1.8%
金融	Finance	1.7%	0.9%	1.0%	0.2%	0.7%	0.7%	0.5%
生活服务	Personal Care	1.7%	3.2%	1.8%	1.3%	2.8%	2.1%	1.9%
服饰鞋包	Apparels	1.5%	1.8%	1.3%	0.6%	1.1%	2.4%	1.5%
汽车用品	Automobile Supplies	1.3%	1.7%	1.0%	1.7%	0.7%	1.1%	0.6%
食品饮料	Food and Beverage	1.2%	1.9%	2.4%	0.9%	1.1%	5.2%	1.8%
结婚服务	Marriage Service	1.1%	0.6%	0.2%	0.1%	0.0%	0.1%	0.0%
母婴儿童	Maternity	0.9%	0.7%	0.5%	0.2%	0.1%	0.3%	0.1%
彩妆护肤	Cosmetics and Skincare	0.9%	1.6%	1.8%	1.1%	1.6%	3.4%	2.0%
数码家电	Electronics and Home Appliances	0.5%	1.3%	1.4%	0.9%	3.8%	7.1%	2.0%
钟表首饰	Watches and Jewelry	0.5%	0.4%	0.2%	0.1%	0.1%	1.0%	1.0%
旅游住宿	Tourism	0.4%	0.6%	0.4%	0.1%	0.3%	0.8%	0.7%
招商加盟	Franchising	0.2%	0.4%	0.2%	0.1%	0.1%	0.1%	0.0%
房地产	Real Estate	0.2%	0.2%	0.4%	0.1%	0.1%	0.2%	0.1%
家居家装	Home Furnishing	0.1%	0.1%	0.2%	0.1%	0.2%	1.4%	0.5%
其他	Others	19.8%	16.6%	24.0%	27.6%	12.9%	3.0%	4.7%

Source: AppGrowing, Data compiled by Goldman Sachs Global Investment Research

- **Story Mode** provides a potential monetization opportunity by introducing an additional channel and creating room for ad load increase, with limited user experience disruption. **User engagement data suggest penetration improvement of story mode has not altered Bilibili's user trend** with steady DAU/MAU (31% in July), robust timespent growth (+39% yoy, vs. Douyin of +10% yoy) and healthy 30-day user retention of 71.5%.
- **Now expect Story Mode to contribute 3%/9%/16% of Bilibili's ad revenue in 2022-24E.** We see clear visibility for Bilibili scaling up monetization of Story Mode via: **1) Continued user engagement mix shift** towards the Story Mode (VV penetration to reach 50% by the end-2023, from high-20s% as of 2Q22); **2) Better conversion**, amid higher eCPM of 16-17 Rmb enabled by better ad CTR (click-through-rate), compared to Bilibili's conventional feed ad featured on its main page; **3) Room for ad load increase**; **4) longer term potential upside** depending on more diverse content offering, KOL incentives (**adding Sparkle/creator ad into Story Mode**) and ads/e-commerce (closed-loop e-commerce live streaming) build up.
- However, given the still intense competition with SFV on content offering, KOL and user timespent, we believe Story Mode is still in the relative early stage in building up the ecosystem. The pace of monetization would depend on its ability to capture the expanded user cohorts and incremental timespent on top of the usual main app visiting.

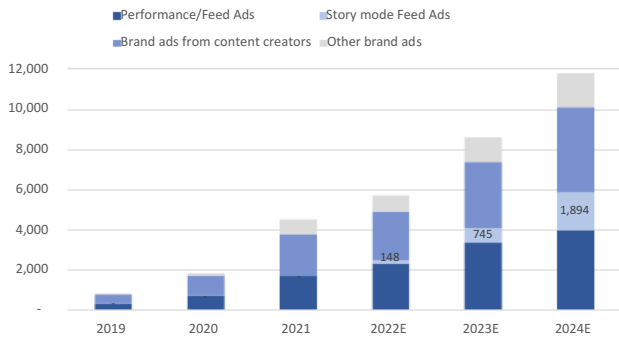
**Exhibit 6: Bili's ads share still lagging way behind timespent share in China internet**  
 Bilibili's timespent share % and ad budget share %



Source: Company data, Goldman Sachs Global Investment Research, QuestMobile

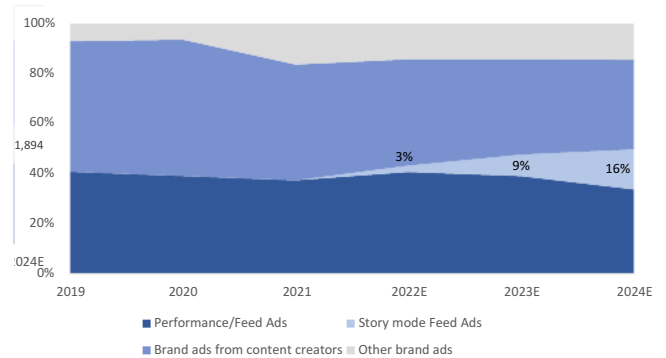
**Exhibit 7: Expect more meaningful contribution from Story Mode feeds from 2023**

Bilibili: Advertising revenue mix (Rmb mn)



Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 8: Bilibili: Advertising revenue mix in %**



Source: Company data, Goldman Sachs Global Investment Research



## Exhibit 9: China online advertising: advertising revenue by platforms

Rmb mn	2019	2020	2021	2022E	2023E	2024E	2025E	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22E	3Q22E	4Q22E	
<b>CHINA ONLINE ADVERTISING REVENUE</b>																
<b>CHINA</b>																
Tencent	68,377	82,271	88,666	80,590	94,543	109,187	124,547	21,820	22,833	22,495	21,518	17,988	17,169	21,600	23,833	
- Media	15,510	14,277	13,313	10,531	10,847	10,847	10,847	3,339	3,300	3,473	3,200	2,300	2,079	2,952	3,200	
- Social and others (ex. Sogou)	52,867	67,994	75,353	70,059	83,695	98,340	113,699	18,481	19,533	18,946	18,318	15,688	15,090	18,648	20,633	
iQIYI	8,271	6,822	7,067	5,468	6,860	6,292	6,707	1,917	1,825	1,660	1,666	1,337	1,155	1,600	1,748	
SOCIAL/MEDIA	10,558	10,274	12,778	11,707	13,972	15,185	16,372	2,528	3,233	3,494	3,518	2,712	2,582	2,996	3,422	
Weibo	2,246	1,841	1,754	1,722	1,757	1,792	1,828	358	395	452	549	365	336	461	560	
NetEase	10,690	12,741	18,131	20,347	24,217	28,205	31,979	3,894	4,538	4,766	4,941	4,525	4,802	5,338	6,682	
Bilibili	817	1,843	4,523	5,702	8,599	11,798	15,619	715	1,049	1,172	1,588	1,041	1,160	1,435	2,067	
Xiaomi	678	979	2,136	2,500	3,400	4,348	5,298	335	456	599	745	444	475	673	908	
Short Form Video (incl. e-com)	86,619	200,139	276,465	315,772	397,437	451,124	496,929	58,652	67,532	76,359	73,922	62,948	65,456	84,922	86,362	
Total	206,180	329,051	423,138	455,715	563,151	642,389	713,445	93,507	104,930	113,702	110,963	93,452	96,231	122,350	127,625	
% yoy	37%	64%	29%	8%	24%	14%	11%	41%	37%	24%	18%	0%	-6%	8%	15%	
<b>ECOMM./O2O</b>																
Alibaba (CMR - ads)	174,609	207,666	232,289	230,177	251,168	267,711	289,396	44,805	60,219	52,337	74,928	46,602	55,198	52,469	77,008	
JD (JD Mall ads)	23,167	32,192	38,753	51,809	59,528	67,007	77,467	8,184	10,094	8,886	11,589	12,899	12,124	11,047	15,738	
PDD	26,914	47,964	72,563	86,096	105,972	125,790	143,284	14,111	18,080	17,946	22,425	18,158	19,063	21,213	27,661	
Meituan	15,840	18,308	29,085	32,242	51,465	62,283	74,700	5,602	7,216	8,822	8,183	7,019	7,021	8,398	9,805	
VIPS	1,091	1,642	2,164	1,757	1,933	2,126	2,339	400	580	516	668	277	348	464	668	
Total	241,621	308,251	374,855	402,081	470,065	524,917	587,186	73,103	96,189	87,107	117,793	83,856	93,754	93,592	130,880	
% yoy	36%	28%	22%	7%	17%	12%	12%	61%	27%	15%	5%	15%	-3%	7%	11%	
<b>SEARCH</b>																
Baidu	78,093	72,840	80,450	77,171	82,642	86,921	91,372	18,094	20,828	21,050	20,723	16,929	17,687	20,795	21,759	
Baidu core (excl. iQIYI)	69,822	66,018	73,628	71,331	76,373	80,192	84,202	16,177	19,003	19,390	19,058	15,592	16,532	19,196	20,011	
Total	77,309	71,905	76,868	74,296	79,376	83,244	87,321	17,069	19,974	20,298	19,657	16,207	17,168	19,836	20,622	
% yoy	-3%	-7%	7%	-3%	7%	5%	5%	19%	13%	3%	-2%	-5%	-14%	-2%	5%	
<b>TOTAL</b>	<b>492,539</b>	<b>710,104</b>	<b>874,923</b>	<b>932,091</b>	<b>1,112,592</b>	<b>1,250,549</b>	<b>1,387,952</b>	<b>183,679</b>	<b>221,093</b>	<b>221,707</b>	<b>248,443</b>	<b>193,515</b>	<b>207,153</b>	<b>235,778</b>	<b>279,127</b>	
% yoy	29%	44%	23%	7%	19%	12%	11%	46%	30%	18%	10%	5%	-6%	6%	12%	
<b>Rev. yoy %</b>																
Tencent	18%	20%	8%	-9%	17%	15%	14%	23%	23%	5%	-13%	-18%	-25%	-4%	11%	
- Media	-15%	-8%	-7%	-21%	3%	0%	0%	7%	0%	-4%	-25%	-31%	-37%	-15%	0%	
- Social and others (ex. Sogou)	33%	29%	11%	-7%	19%	17%	16%	27%	28%	7%	-10%	-15%	-23%	-2%	13%	
iQIYI	-11%	-18%	4%	-23%	7%	7%	7%	25%	15%	-10%	-10%	-30%	-37%	-4%	5%	
SOCIAL/MEDIA	0%	-3%	24%	-8%	19%	9%	8%	31%	34%	21%	17%	7%	-20%	-14%	-3%	
Weibo	41%	13%	18%	11%	11%	8%	6%	26%	25%	11%	11%	3%	10%	12%	17%	
Huya	6%	19%	42%	12%	19%	16%	13%	46%	46%	45%	34%	16%	6%	12%	15%	
Xiaomi	76%	126%	145%	26%	51%	37%	32%	234%	201%	110%	120%	46%	11%	22%	30%	
Bilibili	66%	131%	188%	17%	36%	28%	22%	164%	153%	117%	68%	33%	4%	12%	22%	
Zhihu	86%	131%	38%	14%	26%	14%	10%	46%	44%	32%	32%	7%	3%	11%	17%	
Short Form Video	37%	64%	29%	8%	24%	14%	11%	41%	37%	24%	18%	0%	-8%	8%	15%	
ECOMM./O2O	26%	19%	12%	-1%	9%	7%	8%	45%	17%	5%	0%	2%	-9%	0%	3%	
Alibaba (CMR)	134%	76%	51%	19%	23%	19%	14%	38%	18%	21%	12%	58%	20%	24%	36%	
JD (JD Mall ads)	69%	19%	54%	11%	60%	21%	20%	157%	64%	44%	13%	29%	5%	18%	23%	
PDD	92%	51%	32%	-19%	10%	10%	10%	96%	67%	42%	35%	25%	-3%	5%	20%	
Meituan	36%	28%	22%	7%	17%	12%	12%	21%	60%	40%	-5%	-31%	-40%	-10%	0%	
VIPS	36%	28%	22%	7%	17%	12%	12%	61%	27%	15%	5%	15%	-3%	7%	11%	
SEARCH	-5%	-7%	10%	-4%	7%	5%	5%	27%	18%	4%	0%	-6%	-15%	-1%	5%	
Baidu	-4%	-5%	12%	-3%	5%	5%	5%	27%	18%	6%	1%	-4%	-13%	-1%	5%	
Baidu core (excl. iQIYI)	7%	-21%	-45%	-8%	1%	2%	2%	-14%	-11%	-32%	-49%	-31%	-35%	-20%	2%	
Tencent - Sogou	-3%	-7%	7%	-3%	7%	5%	5%	19%	13%	3%	-2%	-5%	-14%	-2%	5%	
<b>TOTAL</b>	<b>29%</b>	<b>44%</b>	<b>23%</b>	<b>7%</b>	<b>19%</b>	<b>12%</b>	<b>11%</b>	<b>46%</b>	<b>30%</b>	<b>18%</b>	<b>10%</b>	<b>5%</b>	<b>-6%</b>	<b>6%</b>	<b>12%</b>	

Source: Company data, Goldman Sachs Global Investment Research

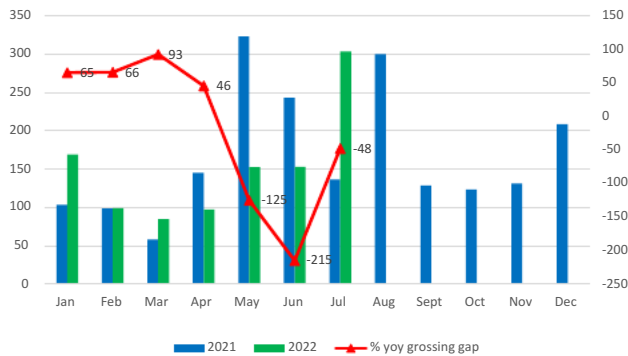
## Mobile Games: Banhao still the swing factor, Space Hunter and Pretty Derby (Taiwan) partially offsets legacy games' decline

**Bilibili's mobile game revenue remains on track towards its 2022E guidance of flat %yoy growth, as we look past the weak momentum in 2Q while factoring the emergence of 2 new titles in 3Q, we estimate Rmb1.1bn/Rmb5.2bn game revenue for 2Q22 and 2022E (-12%/2% yoy), factoring in:**

- **Domestic games: yoy decline in legacy games (partly) offset by new game release.** Space Hunter 3 (时空猎人3), released on 29-June, has seen solid first month grossing of c.Rmb160mn in July, followed by gradual decline since release, a relatively weak performance compared to last year's new game Guardian Tales (released 27 April 2021).
- **To gauge the timeline of Bilibili's mobile game revenue returning to positive % yoy growth** (after -12% yoy in 2Q22E), we compare domestic grossing of Bilibili's exclusively-distributed games for 2021/2022. We note up till July 2022, YTD grossing of Bilibili's exclusive titles is around Rmb1.06bn, behind Rmb1.11bn of 2021's level

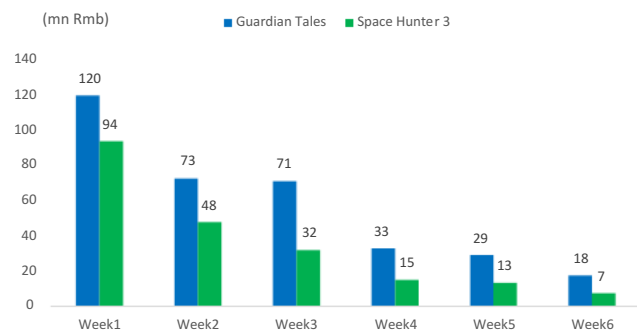
by c.Rmb50mn, which should further narrow towards end-2022E given the easy comps starting Sept-22, as well as Bilibili’s expanding pipeline of new games (3 banhao received YTD). That said, we do not expect any likely inflection of Bilibili’s domestic game revenue, unless its blockbuster title (Pretty Derby) receive Banhao in mainland China, which we deem unlikely given the lengthened timeline for international game approval.

**Exhibit 10: Domestic game grossing in 2021 and 2022**  
Rmb mn



Source: SensorTower

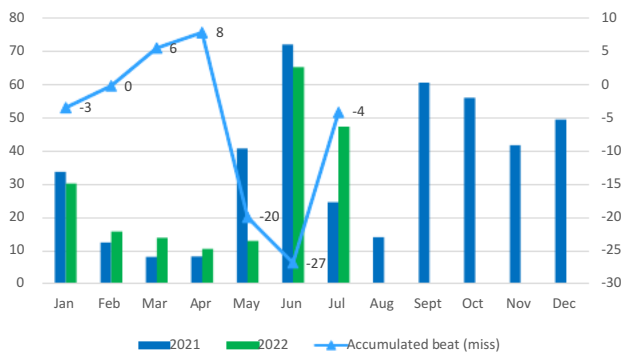
**Exhibit 11: First weeks grossing comparison between Guardian Tales and Space Hunter 3**



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

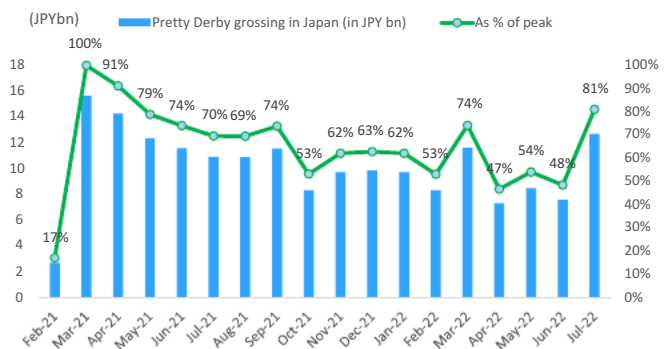
- **International games: yoy flat to slight increase** mainly on the solid performance of new games. Specifically, Pretty Derby (赛马娘), launched in Taiwan on 25 June, has registered cumulative grossing of Rmb46mn in the first 7 weeks of its release, **equivalent of ranking c. No.60 in the mainland China mobile game market**. On the flip side, we expect the game to demonstrate better longevity (relative to other Bili’s games) if referencing the resilient performances of the game’s Japanese version (July-22 grossing 81% of peak level, despite the game being launched 1.5 years ago).

**Exhibit 12: Bilibili: International game grossing in 2021 and 2022**  
RMB mn



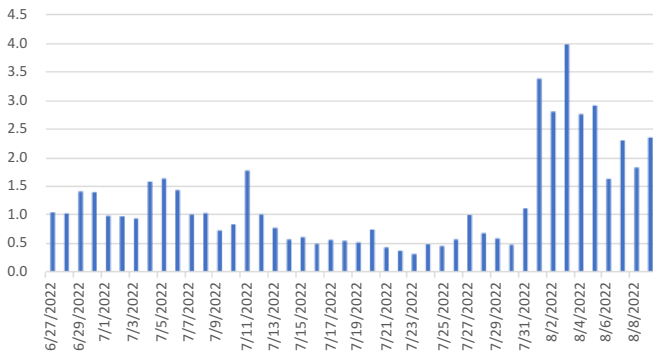
Source: SensorTower

**Exhibit 13: Pretty Derby grossing in Japan (published by CyberAgent)**



Source: SensorTower

**Exhibit 14: Pretty Derby grossing (Rmb mn) in Taiwan (published by Bilibili)**



Source: SensorTower

**Bilibili has received 3 Banhao approvals since the resumption of game approvals, the highest among China game peers (alongside iDreamSky).** On 12 July and 1 Aug, NPPA issued the 3rd and 4th batch approval of the monetization license (Banhao) (see our [note](#)). Bilibili received 2 Banhao approvals in July (Forge in Shadow Torch 暗影火炬城 and Non Anonymous Instruction 非匿名指令) and another in August (ChangAn Bai Wan Guan 长安百万贯), while both Tencent and NetEase received none. Bilibili’s game pipeline currently consists of: **1) 5 games with Banhao approval**, and **2) 25 games pending Banhao approvals**, most are games with anime-art style.

Exhibit 15: Bilibili's domestic pipeline

English Name	Chinese Name	Genre	Platform	BarHao 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	古剑奇谭木语人	Card/RPG	Mobile	Y	4/8/2020	Public testing on July 27														
Warm Snow	暖雪	Rogue Lite/Action	PC	Y	7/22/2021	BarHao Approved	Public testing on Aug 4													
Noland	诺弗兰物语	Simulation	Mobile	Y	8/21/2020		Public testing on Aug 26													
Bust 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	BarHao 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 on 12 August			Beta testing commenced on Nov 16		Public testing on Jan 13								Server to close on 8 Aug
Pretty Derby Umamusume	赛马娘	Card/ACG	Mobile	Overseas release													Taiwan release on 27 June			
Space Hunter 3	时空猎人3	Anime/Action	Mobile	Y	11/30/2020											Closed beta testing on 25 May	Public testing on 29 June			
<b>Game pipeline</b>																				
Gem trader	宝石研物语：伊思之石	Card	Mobile	Y	3/19/2021						Beta testing on 31 Mar								Beta testing on 12 July	
Non-anonymous commands	非匿名指令	Card	Mobile	Y	7/12/2022									Closed beta testing on 7 April					BarHao Approved	Beta testing on 4 Aug
Hurting moment	狩猎时刻	Anime/action	Mobile	Y	7/29/2020						Beta testing on 20 Jan									
Chang An Bai Wai Guan	长安西万贯	Simulation	Mobile	Y	8/1/2022					Alpha testing on Dec 15										BarHao Approved
Forge in shadow torch	暗影火炬城	Action	PC	Y	7/12/2022															BarHao Approved
THRUID	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 6 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 18 May				
Code: Baija	代号：百家	Rougelike/action	Mobile	N											Alpha testing on 11 April					Beta testing commenced on 9 Aug
RE: AETATS	重构 阿瑞提斯	MOBA	Mobile	N				Alpha test on Sep 23				Beta test on Jan 13								

Source: Company data

Exhibit 16: Bilibili: domestic grossing % yoy and % market share by month

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%

Grossing % yoy - by titles		Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
Azur Lane	碧蓝航线							97%
Fate/GrandOrder	命运：冠位指定							237%
GuardianTales	坎公骑冠剑							-80%
Princess Connect	公主连结							-20%
Nofland	诺弗兰物语							0%
BanGDream	BanGDream							57%
Gu Jian Qi Tan	古剑奇谭							-69%
You Jiu Zhi Shu	悠久之树							0%
<b>Space Hunter 3</b>	<b>时空猎人3</b>							0%
Burst Witch	爆裂魔女							0%

Domestic Market share %		Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
Market share % - by titles		0.9%	0.6%	0.5%	0.5%	0.8%	1.1%	1.7%
Azur Lane	碧蓝航线							0.14%
Fate/GrandOrder	命运：冠位指定							0.40%
Guardian Tales	坎公骑冠剑							0.06%
Princess Connect	公主连结							0.07%
Nofland	诺弗兰物语							0.06%
BanGDream	BanGDream							0.03%
Gu Jian Qi Tan	古剑奇谭							0.03%
You Jiu Zhi Shu	悠久之树							0.01%
<b>Space Hunter 3</b>	<b>时空猎人3</b>							<b>0.92%</b>
Burst Witch	爆裂魔女							0.01%

Source: SensorTower

### Live streaming and VAS: expect continued moderation in membership growth due to content censorship, LS continues to gain share with increasing paying users

Looking ahead, we model 30%/26% growth in live streaming and VAS segment for 2Q22E/2022E, with the growth primarily underpinned by live streaming, through steady addition of paying users. For VAS, while we view Bilibili remains at the early penetration stage we believe the number of subscribers will remain moderated given tightened censorship of Japanese anime. We currently expect VAS membership will remain flattish at around 20mn for 2022E.

### Others & e-commerce

We forecast -3%/6% growth in 2Q22E/2022E, trimming down our previous estimate of -3%/21% growth considering rising macroeconomic volatility, with Bilibili voluntarily scaling back some forms of monetization mechanism that encourage impulsive purchasing.

## Earnings and Valuation changes

### Both gross margin and operating margin to hit the bottom in 2022E, gradual improvement in 2H22E on revenue sharing cost control and lower S&M ratio

Exhibit 17: Bilibili: key changes to GSe

	New		New		New	
	2022E	% Diff.	2023E	% Diff.	2024E	% Diff.
Total revenues (Rmb mn)	22,667	-2%	30,524	-4%	38,541	-5%
Gross margin, non-GAAP	17.8%	0.8ppts	23.2%	0.1ppts	27.8%	-0.9ppts
Net margin, non-GAAP	-29.9%	1.2ppts	-15.0%	0ppts	-4.8%	-0.1ppts

Source: Company data, Goldman Sachs Global Investment Research

We trim our 2022E/23E/24E revenue estimates by -2%/-4%/-5%. We now estimate yoy revenue growth rates of **17%/35%/26%**, primarily as we factor in weaker VAS subscription revenue growth from content supply constraint, partially offset by resilient advertising revenue on stronger performance ads driven by incremental demand from game verticals and incremental ad inventory from Story Mode.

We expect Bilibili to achieve **15.7%/17.8% gross margin** and **-36.8%/-29.5% non-GAAP operating margin in 2022E/2022E**, leading to **-37.9%/-29.9% non-GAAP net margin in 2022E/2022E** respectively.

We fine-tune our 2022-24E GPM to 18%/23%/28%, +1.8ppts/+0.1ppts/-0.9ppts, with our higher 2022E assumptions underpinned by a transitory mix shift within advertisement (from the lower margin creator advertising to more higher margin traffic based performance ads). With that, our 2022E/23E/24E net margin changes +1.2ppts/0ppts/-0.1ppts, as we also factor in **1)** higher R&D spending on new game studio acquisition; offset by **2)** more disciplined S&M spending on user acquisition.

With our revised estimates, our 12-month DCF-based target prices for BILI (ADS)/9626.HK rise by 4%/3% to **US\$29/HK\$226** from US\$28/HK\$219 (15%/3% WACC/terminal growth rate unchanged), implying 11% upside / 6% downside. We maintain our **Neutral** rating.

## Exhibit 18: Bilibili: financial summary

	2019	2020	2021	2022E	2023E	2024E	2025E
<b>MAU (mn)</b>	117	186	250	318	381	420	453
%yoy	35%	58%	34%	27%	20%	10%	8%
<b>DAU (mn)</b>	35	52	67	86	107	120	131
DAU/MAU	30%	28%	27%	27%	28%	29%	29%
<b>RMB/mn</b>	2019	2020	2021	2022E	2023E	2024E	2025E
<b>Revenue</b>	6,778	11,999	19,384	22,667	30,524	38,541	47,029
1. Mobile games	3,598	4,803	5,091	5,209	5,902	6,470	6,987
a. Licensed Game	2,849	3,729	3,731	3,979	4,013	4,270	4,612
existing	2,570	1,957	2,222	2,410	2,720	2,749	2,921
new	279	1,771	1,509	1,569	1,293	1,521	1,690
b. Jointly operation	749	1,075	1,360	1,230	1,889	2,200	2,376
2. Live broadcasting and VAS	1,641	3,846	6,935	8,739	11,986	15,229	18,402
a. Live	591	1,308	2,692	3,909	5,610	7,094	8,518
%yoy	82%	121%	106%	45%	44%	26%	20%
# quarterly paying users	1.4	2.6	4.3	6.1	7.8	8.9	9.8
ARPPU, mo	36	43	52	54	60	66	72
b. Subscription	1,050	2,538	4,243	4,830	6,376	8,135	9,884
# subscribers	5.9	12.2	18.0	20.2	24.3	28.2	31.7
paying ratio	5.0%	6.6%	7.2%	6.4%	6.4%	6.7%	7.0%
ARPU, mo	14.8	17.4	19.7	19.9	21.9	24.1	26.0
3. Advertising	817	1,843	4,523	5,702	8,599	11,798	15,619
ads rev per MAU	6.95	9.92	18.11	17.94	22.55	28.12	34.47
4. Others	722	1,507	2,834	3,016	4,036	5,044	6,021
<b>GP (GAAP)</b>	1,190	2,840	4,043	3,952	6,979	10,614	14,674
1. Mobile games	2,102	2,777	2,970	2,949	3,621	4,086	4,459
Licensed Game	1,387	1,764	1,703	1,811	1,871	2,043	2,253
Jointly operation	714	1,013	1,267	1,138	1,749	2,043	2,206
2. Live broadcasting and VAS	(551)	(246)	(374)	(892)	(534)	203	860
a. Live	57	46	(128)	(94)	73	386	775
b. Subscription	(608)	(292)	(246)	(798)	(606)	(183)	84
3. Advertising	(154)	222	1,299	1,851	3,732	5,927	8,770
4. Others	(207)	87	148	43	160	399	587
<b>Gross Margin</b>	14%	24%	21%	17%	23%	28%	31%
1. Mobile games	58%	58%	58%	57%	61%	63%	64%
Licensed Game	49%	47%	46%	46%	47%	48%	49%
Jointly operation	95%	94%	93%	93%	93%	93%	93%
2. Live broadcasting and VAS	-34%	-6%	-5%	-10%	-4%	1%	5%
a. Live	10%	4%	-3%	-2%	1%	3%	9%
b. Subscription	-58%	-12%	-6%	-17%	-10%	-2%	1%
3. Advertising	-19%	12%	29%	32%	43%	50%	56%
4. Others	-28%	6%	5%	1%	4%	8%	10%
<b>Opex (GAAP)</b>	(2,685)	(5,981)	(10,472)	(11,899)	(12,552)	(13,579)	(14,334)
S&M as % Sales	17.7%	29.1%	29.9%	24.2%	19.8%	17.4%	15.2%
G&A as % Sales	8.7%	8.1%	9.5%	9.3%	7.1%	6.0%	5.1%
R&D as % Sales	13.2%	12.6%	14.7%	18.1%	14.2%	11.8%	10.2%
<b>EBIT (non-GAAP)</b>	(1,323)	(2,755)	(5,429)	(6,677)	(4,377)	(1,681)	1,673
%margin	-19.5%	-23.0%	-28.0%	-29.5%	-14.3%	-4.4%	3.6%

1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22E	4Q22E
223	237	267	272	294	311	331	336
30%	38%	35%	35%	31%	31%	24%	24%
60	63	72	72	79	84	91	91
27%	26%	27%	27%	27%	27%	27%	27%
3,901	4,495	5,207	5,781	5,054	4,938	5,941	6,734
1,171	1,233	1,392	1,295	1,358	1,090	1,425	1,337
878	925	1,002	926	1,018	806	1,111	1,043
293	308	390	369	339	283	313	294
1,497	1,635	1,909	1,895	2,052	2,127	2,329	2,231
553	619	822	697	870	921	1,123	995
1	115%	138%	72%	57%	49%	37%	43%
3.9	4.2	4.6	4.6	5.6	5.9	6.5	6.4
47	50	60	50	52	52	58	52
943	1,016	1,086	1,193	1,182	1,206	1,206	1,236
16.10	17.40	18.20	20.10	20.10	20.10	20.10	20.60
7.2%	7.3%	6.8%	7.4%	6.8%	6.5%	6.1%	6.1%
19.5	19.5	19.9	19.9	19.6	20.0	20.0	20.0
715	1,049	1,172	1,588	1,041	1,160	1,435	2,067
3.20	4.42	4.39	5.84	3.54	3.73	4.33	6.16
519	578	734	1,003	603	562	753	1,098
938	989	1,018	1,098	807	758	1,038	1,349
24.0%	22.0%	19.6%	19.0%	16.0%	15.4%	17.5%	20.0%
25.6%	31.1%	31.4%	30.5%	24.8%	24.6%	24.0%	23.5%
10.0%	9.7%	9.1%	9.3%	10.6%	11.5%	8.5%	7.5%
14.9%	15.0%	15.1%	13.8%	20.0%	20.6%	17.5%	15.5%
(817)	(1,281)	(1,640)	(1,692)	(1,713)	(1,819)	(1,666)	(1,479)
-20.9%	-28.5%	-31.5%	-29.3%	-33.9%	-36.8%	-28.0%	-22.0%

Source: Company data, Goldman Sachs Global Investment Research

## Valuation

## Exhibit 19: Our DCF based 12-month target prices for BILI are increased to US\$29/HK\$226

Discounted cash flow (Rmb mn)	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
<b>MAU</b>	272	340	403	441	475	502	526	551	573	592
<b>Revenues</b>	19,384	22,667	30,524	38,541	47,029	54,911	63,180	71,815	80,546	89,885
% yoy	62%	17%	35%	26%	22%	17%	15%	14%	12%	12%
Mobile games yoy	6%	2%	13%	10%	8%	7%	6%	6%	6%	5%
Live broadcasting and VA yoy	80%	26%	37%	27%	21%	16%	14%	13%	11%	10%
Advertising yoy	145%	26%	51%	37%	32%	22%	20%	17%	16%	15%
Cost of Revenue	(15,341)	(18,715)	(23,545)	(27,927)	(32,355)	(36,533)	(40,516)	(44,507)	(48,084)	(51,553)
<b>Gross profit</b>	4,043	3,952	6,979	10,614	14,674	18,379	22,664	27,308	32,462	38,332
Operating income, GAAP	(6,429)	(7,748)	(5,573)	(2,965)	341	3,118	6,514	10,031	14,123	18,487
Operating income, non-GAAP	(5,429)	(6,677)	(4,377)	(1,681)	1,673	4,518	8,044	11,683	15,883	20,353
OPM, non-GAAP	-28.0%	-29.5%	-14.3%	-4.4%	3.6%	8.2%	12.7%	16.3%	19.7%	22.6%
Incremental OPM	-36%	-38%	29%	34%	40%	36%	43%	42%	48%	48%
Effective tax rate	1.4%	1.4%	1.2%	0.9%	-49.7%	-21.8%	-18.5%	-17.5%	-16.9%	-16.5%
<b>Operating income post tax, GAAP</b>	(6,520)	(7,853)	(5,842)	(2,992)	171	2,437	5,309	8,281	11,743	15,437
Depreciation	539	584	777	979	1,189	1,397	1,599	1,792	1,952	2,096
Amortization	1,903	1,993	2,343	2,802	3,450	3,645	3,698	3,595	4,066	4,539
Share-based compensation	1,000	1,070	1,196	1,284	1,332	1,400	1,530	1,652	1,760	1,866
<b>Gross cash flow</b>	(3,079)	(4,207)	(1,326)	2,073	6,142	8,878	12,135	15,320	19,521	23,937
<b>EBITDA, non-GAAP</b>	(2,987)	(4,101)	(1,257)	2,100	6,312	9,559	13,340	17,070	21,901	26,987
Less: Change in working capital	(9)	3,215	1,583	1,428	1,441	1,408	1,434	1,447	1,346	1,324
Less: Capital expenditure	(965)	(1,088)	(1,465)	(1,665)	(1,889)	(2,052)	(2,195)	(2,321)	(2,421)	(2,512)
Less: Acquisition of content	(2,722)	(2,403)	(3,201)	(3,602)	(3,933)	(4,055)	(4,170)	(4,244)	(4,298)	(4,308)
<b>Free cash flow</b>	(6,775)	(4,483)	(4,409)	(1,766)	1,761	4,180	7,203	10,202	14,148	18,442
FCF margin	-35%	-20%	-14%	-5%	4%	8%	11%	14%	18%	21%
<b>Terminal value</b>										158,092
<b>Total FCF (2030)</b>	(6,775)	(4,483)	(4,409)	(1,766)	1,761	4,180	7,203	10,202	14,148	176,534

DCF Summary	
<b>WACC calculation</b>	
Equity market premium	7.0%
Risk free rate	3.5%
Beta	1.6
Cost of equity	15.0%
Cost of debt	5.0%
Tax rate	15.0%
After-tax cost of debt	4.3%
Long-run debt-to-capital ratio	0%
<b>WACC</b>	<b>15.0%</b>
Terminal growth rate	3.0%
Exit FCF multiple	8.3

DCF summary		2023-30E
<b>Firm value (Rmb mn)</b>		69,326
2023-30E FCF value		17,700
Terminal value		51,627
Net cash (Rmb mn)		6,375
<b>Equity value (Rmb mn)</b>		75,701
FX		6.60
<b>Equity value (US\$ mn)</b>		11,470
<b>Equity value (HK\$ mn)</b>		89,465
ADS outstanding (mn)		396
<b>Value per ADS (US\$)</b>		29.0
<b>Value per share (HK\$)</b>		226.0
Implied 2023E EV/Sales		2.3x

Source: Goldman Sachs Global Investment Research

**Upside risks:** 1) Further growth in time spent share; 2) Stronger online game revenue growth; 3) Progress on cost-cutting initiatives; 4) Banhao approval earlier than expected.

**Downside risks:** 1) Bigger gaming decline and negative margin mix, despite high R&D; 2) Advertising revenue decline due to macro economy slowdown; 3) Timespent slowdown due to competition with SFV players.



# Disclosure Appendix

## Reg AC

We, Lincoln Kong, CFA, Ronald Keung, CFA 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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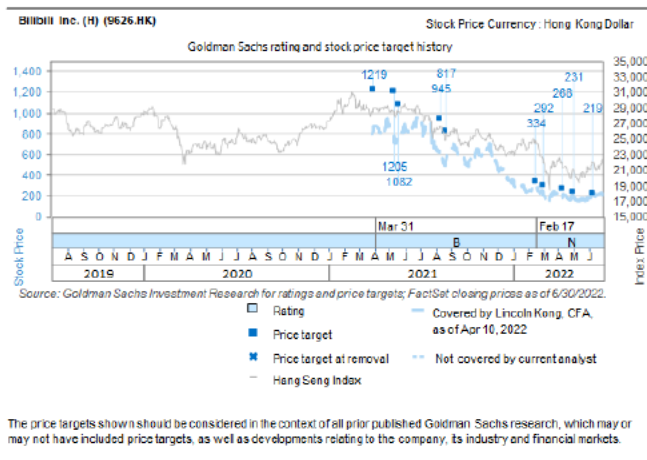
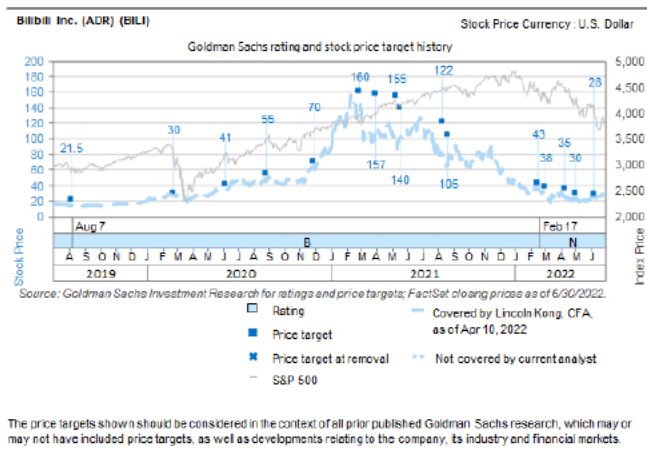
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