

# Bilibili (BILI US)

## User base and engagement growth are crucial

Due to unexpected macro events in 2Q22, Bili's revenue growth decelerated to +18.7% YoY in 1H22 (2021: 61.3% YoY) and adjusted net loss widened from RMB2.2bn in 1H21 to RMB3.6bn in 1H22. Its user community engagement remains healthy, with MAU/time spend up 29/10% YoY in 2Q22. At this stage, we view accelerating user base growth, cultivating user community and improving user engagement as crucial for Bili's long-term prospects, which will improve its ecosystem self-sustainability, balancing profit-sharing with content contributors lead to better margins and cash flows. We forecast total revenue growth of +9.8% YoY in 2H22E. Bili will focus more on the monetization and operating efficiency improvement in 2H22E. We forecast total revenue will grow by 20.7/16.2% YoY to RMB26.6/30.9bn in 2023/2024E, and adjusted net loss will narrow from RMB7.7bn in 2022E to RMB5.2/2.6bn in 2023/2024E. Our SOTP derived target price is US\$20.0 per ADS (2.1/1.8x 22E/23E PS). We are transferring coverage with a BUY rating.

- **Healthy development of user community.** Both user traffic and engagement achieved healthy growth in 2Q22. Average MAUs/daily time spend per DAU was up 29/10% YoY to 306mn/89 minutes in 2Q22. We expect its average MAUs to maintain over 20% YoY growth in 2H22E supported by effective content and user acquisition investment. Its new short-video content format, Story Mode, saw total video views grew by over 400% YoY in 2Q22. We expect the new content format to further increase user stickiness and Bili's monetization potential.
- **Recovering monetization in 2023E.** We forecast VAS revenue to grow at CAGR of 23.6% over 2021-2024E and account for 42% of total revenue in 2024E, mainly driven by growth from live streaming business. Bili stepped up effort to develop its live streaming content ecosystem via maintaining attractive revenue-sharing ratio and better integration of the PUGV and live streaming ecosystems. For ad business, we remain prudent on Bili's 2H22E ad revenue growth outlook (+9.4% YoY), but expect ad revenue growth to reaccelerate to +29.6/23.2% YoY and account for 25.4/27.0% of total revenue in 2023/2024E, driven by 1) recovery of overall ad demand, especially in key verticals such as games, auto and e-commerce; 2) innovation in new ad format like Story Mode.
- **Key to deliver quality growth.** Driven by improved GPM and operating efficiency, we forecast adjusted net loss margin to narrow from -34.9% in 2022E to -19.7/-8.5% in 2023/2024E, and free cash outflow to narrow and improve from RMB7.1bn in 2022E to RMB6.5/3.3bn in 2023/2024E. Bili is trading at 1.3x LTM PS, a historical low and 1.3x S.D. below its 2-year average. Recent sell-off priced in monetization pace periodically entering lower pace. As long as Bili can maintain its user base and engagement growth, as well as diversify content mix, its long-term monetization potential remains intact.

### Earnings Summary

(YE 31 Dec)	FY20A	FY21A	FY22E	FY23E	FY24E
Revenue (RMB mn)	11,999	19,384	22,030	26,584	30,880
YoY growth (%)	77.0	61.5	13.7	20.7	16.2
Gross margin (%)	23.7	20.9	16.9	22.5	27.7
Operating profit (RMB mn)	(3,141)	(6,429)	(8,400)	(6,252)	(3,495)
Adjusted net profit (RMB mn)	(2,560)	(5,478)	(7,685)	(5,230)	(2,622)
EPS (Reported) (RMB cents)	(871)	(1,788)	(2,238)	(1,565)	(941)
Consensus EPS (RMB cents)	(871)	(1,788)	(2,093)	(1,514)	(853)
P/S (x)	2.4	1.5	1.3	1.1	0.9

Source: Company data, Bloomberg, CMBIGM estimates

## BUY (Maintain)

**Target Price** US\$20.00  
**Up/Downside** 101.4%  
**Current Price** US\$9.93

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### Stock Data

Mkt Cap (US\$ mn)	3,907.8
Avg 3 mths t/o (US\$ mn)	19.5
52w High/Low (US\$)	89.02/9.19
Total Issued Shares (mn)	393.5

Source: FactSet

### Shareholding Structure

Rui Chen	12.6%
Tencent	11.2%

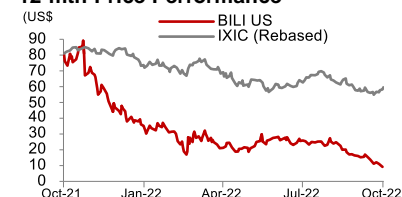
Source: Company data

### Share Performance

	Absolute	Relative
1-mth	-38.6%	-39.1%
3-mth	-61.7%	-58.8%
6-mth	-53.3%	-44.5%

Source: FactSet

### 12-mth Price Performance



Source: FactSet

## Business update and financial forecast

Macro conditions, tightening regulations on content and gaming sectors adversely impacted Bili's monetization progress in 2022. Total revenue growth decelerated to +18.7% YoY in 1H22 (2021: 61.3% YoY). With continuous content and product investment despite slower revenue growth, Bili's adjusted net loss also widened from RMB2.2bn in 1H21 to RMB3.6bn in 1H22. Looking into 2H22E, we expect the macro impact to linger and forecast total revenue growth of +9.8% YoY in 2H22E. As Bili will focus on monetization and operating efficiency improvement in 2H22E, we forecast adjusted net loss margin to contract to -34.0/-32.2% in 3Q22E/4Q22E (2Q22: -40.0%).

As the macro condition improves into 2023, we forecast total revenue to grow by 20.7/16.2% YoY to RMB26.6/30.9bn in 2023/2024E. Supported by improving monetization and operating leverage, we estimate adjusted net loss will narrow from RMB7.7bn in 2022E to RMB5.2/2.6bn in 2023/2024E.

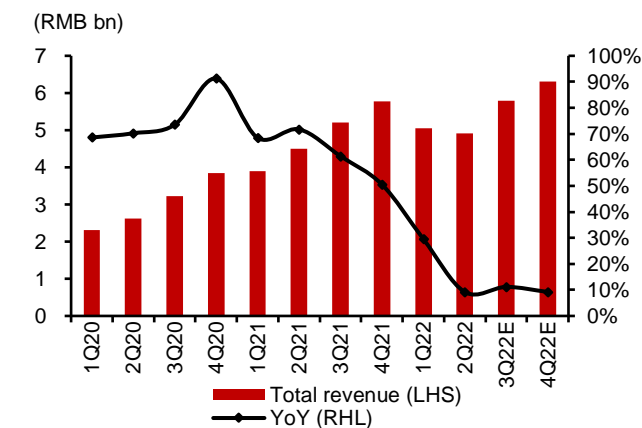
**Figure 1: CMBIGM estimates vs consensus**

RMB mn	CMBIGM			Consensus			Diff (%)		
	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
Revenue	22,030	26,584	30,880	22,033	28,078	34,492	0.0%	-5.3%	-10.5%
Gross Profit	3,717	5,976	8,548	3,813	6,384	9,363	-2.5%	-6.4%	-8.7%
Operating Profit	(8,400)	(6,252)	(3,495)	(7,600)	(5,359)	(2,184)	na	na	na
Adjusted net profit	(7,685)	(5,230)	(2,622)	(7,140)	(4,918)	(1,948)	na	na	na
Adjusted EPS (RMB)	(19.5)	(13.3)	(6.7)	(18.7)	(12.5)	(4.9)	na	na	na
Gross Margin	16.9%	22.5%	27.7%	17.3%	22.7%	27.1%	-0.4 ppt	-0.3 ppt	0.5 ppt
Operating Margin	-38.1%	-23.5%	-11.3%	-34.5%	-19.1%	-6.3%	-3.6 ppt	-4.4 ppt	-5.0 ppt
Adjusted net margin	-34.9%	-19.7%	-8.5%	-32.4%	-17.5%	-5.6%	-2.5 ppt	-2.2 ppt	-2.8 ppt

Source: Company data, CMBIGM estimates

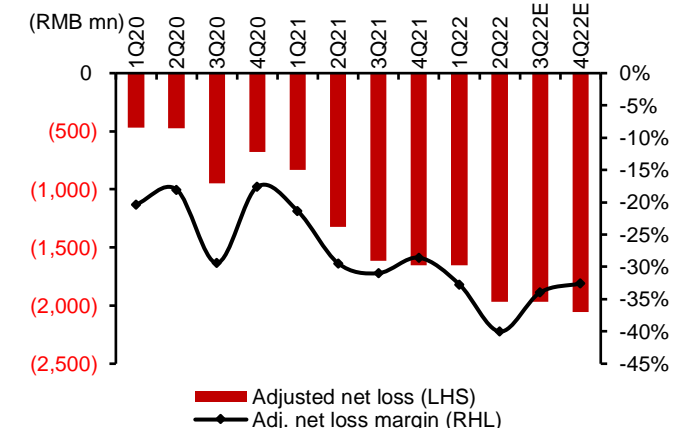
Bili's business operations were disrupted by the macro challenges and resurgence of the COVID-19 in 2Q22. Total revenue growth decelerated to +9.2% YoY in 2Q22 (the lowest since 2018) and adjusted net loss margin widened by 10.6pp YoY to -40.0% in 2Q22. At this stage of growth, we believe Bili needs to accelerate the growth of user base, in order to establish a large enough ecosystem which will create economics value that can keep the platform's development self-sustaining. It will involve growing user base, user time spend and engagement. For instance, larger user base would give Bili more room to adjust down revenue sharing ratio of its live-streaming business to industry norm-level (50-60%).

**Figure 2: Bili: quarterly revenue trend**



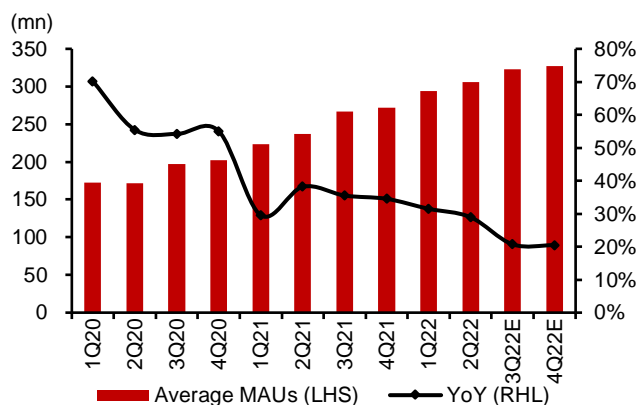
Source: Company data, CMBIGM estimates

**Figure 3: Bili: adjusted net loss margin**

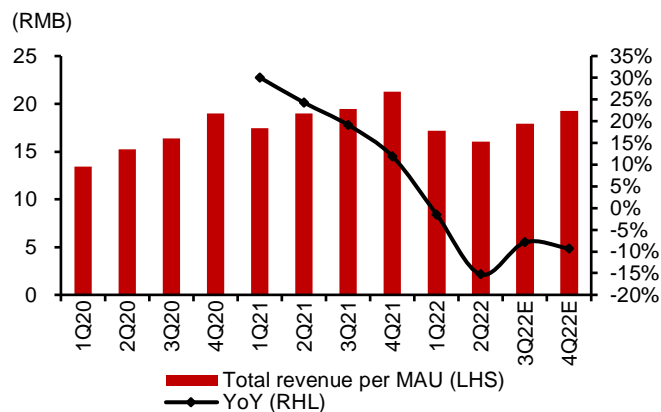


Source: Company data, CMBIGM estimates

Both user traffic and engagement maintained healthy growth in 1H22. Average MAUs was up 30% YoY to 300mn in 1H22, and the DAU to MAU ratio also rose by 0.5pp YoY to 27.2% in 1H22. However, Bili's monetization in 1H22 was disrupted by resurgence of COVID-19, the dampening ad demand and the supply constraint of quality game titles. Total revenue per MAU declined by 1.5/15.3% in 1Q22/2Q22, which reflects the slower monetization pace. Looking into 2023E, we expect Bili's monetization to gradually return back on track driven by recovery of advertising and gaming businesses.

**Figure 4: Bili: quarterly MAU trend**

Source: Company data, CMBIGM estimates

**Figure 5: Bili: quarterly revenue per MAU**

Source: Company data, CMBIGM estimates

In terms of revenue mix, we estimate VAS/advertising/mobile game/e-commerce business to account for 39.8/23.7/23.3/13.3% of total revenue in 2022E, 41.4/25.3/20.3/13.0% of total revenue in 2023E, 42.4/27.0/19.1/11.6% of total revenue in 2024E. We forecast VAS/advertising/mobile game/e-commerce business to deliver revenue CAGR of 23.6/22.6/5.0/8.0% over 2021-2024E.

**Figure 6: Bili: key financial forecasts**

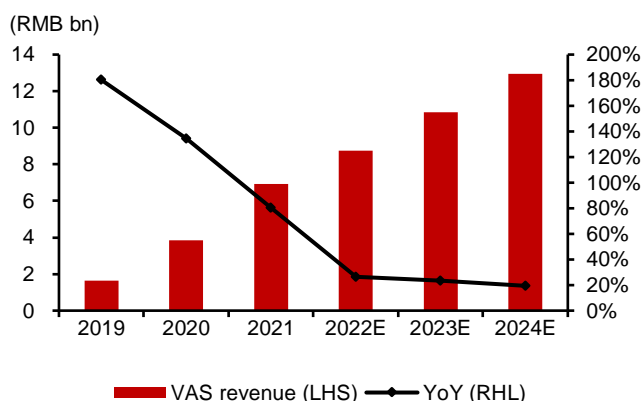
(RMB mn)	2021	2022E	2023E	2024E	3Q22E	4Q22E
Mobile games	5,091	5,126	5,614	5,900	1,436	1,286
yoy%	6.0%	0.7%	9.5%	5.1%	3.2%	-0.7%
VAS	6,935	8,764	10,956	13,081	2,233	2,375
yoy%	80.3%	26.4%	25.0%	19.4%	17.0%	25.3%
Advertising	4,523	5,218	6,760	8,329	1,383	1,636
yoy%	145.5%	15.4%	29.6%	23.2%	18.0%	3.0%
E-commerce and others	2,834	2,923	3,254	3,571	736	983
yoy%	88.1%	3.1%	11.3%	9.7%	0.3%	-2.1%
<b>Total revenue</b>	<b>19,384</b>	<b>22,030</b>	<b>26,584</b>	<b>30,880</b>	<b>5,788</b>	<b>6,279</b>
yoy%	61.5%	13.7%	20.7%	16.2%	11.2%	8.6%
<b>Average MAUs</b>	<b>250</b>	<b>312</b>	<b>378</b>	<b>446</b>	<b>323</b>	<b>327</b>
yoy%	34.5%	25.0%	21.0%	18.0%	7.8%	5.1%
Gross profit margin (%)	20.9%	16.9%	22.5%	27.7%	17.4%	19.9%
S&M expense ratio (%)	29.9%	23.5%	19.5%	16.0%	23.0%	22.6%
R&D expense ratio (%)	14.7%	21.0%	18.0%	15.5%	21.0%	20.2%
Adjusted net loss margin (%)	-28.3%	-34.9%	-19.7%	-8.5%	-34.0%	-32.2%
<b>Adjusted net loss</b>	<b>(5,478)</b>	<b>(7,685)</b>	<b>(5,230)</b>	<b>(2,622)</b>	<b>(1,966)</b>	<b>(2,020)</b>

Source: Company data, CMBIGM estimates

## VAS (39.8% of 2022E revenue)

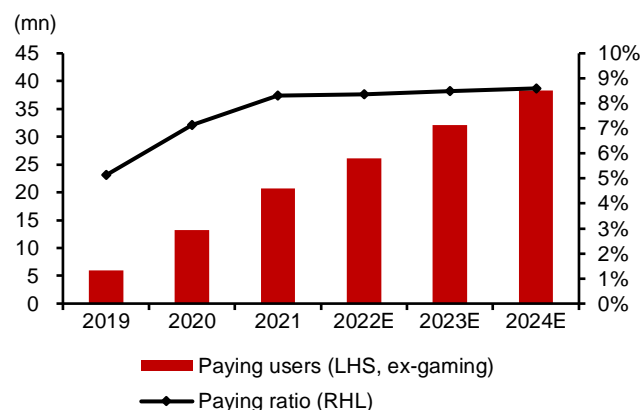
For VAS business, we forecast its revenue to increase by 26.4/25.0/19.4% YoY to RMB8.8/11.0/13.1bn in 2022/2023/2024E, and contribute 39.8/41.2/42.4% of total revenue. We estimate VAS revenue growth will slightly slow to +21.2% YoY in 2H22E, as Bili's premium membership business is likely to be impacted by the control in content investment and the more stringent regulatory environment on internet content in 2H22E. Going forwards, we believe the development of Bili's live streaming ecosystem will be driven by the better integration of Bili's PUGV ecosystem and live streaming ecosystem. The better integration already attracted more active live broadcasters. In 2Q22, the number of active live broadcasters grew over 100% YoY. And as Bili's user base grows to self-sustaining mass base of over 400mn, we expect the revenue sharing economics would adjust to industry norm level. In 2021, Bili shared c.85% of its live streaming revenue with the live broadcasters amid intensifying competitions for live broadcasters. As the competition rationalizes, we expect Bili live streaming revenue sharing ratio will drop to c.80% in 2022E and the industry norm level (c.30%) in the long term. More rational revenue sharing ratio will support VAS business GPM improvement.

Figure 7: Bili: VAS revenue



Source: Company data, CMBIGM

Figure 8: Bili: paying users estimate (ex-gaming)



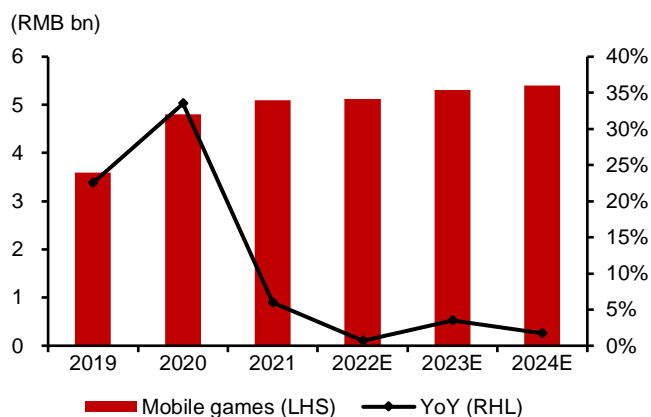
Source: Company data, CMBIGM

## Advertising (23.7% of 2022E revenue)

We estimate advertising revenue growth will decelerate to +15.4% YoY in 2022E, mainly due to the macro uncertainty and resurgence of the pandemic. Advertising revenue increased by 10.4% YoY to RMB1.2bn in 2Q22. Bili's ad demand was hit by the resurgence of pandemic in major cities, especially given that Bili's advertisers concentrated in Shanghai, which experienced lockdown in 2Q22.

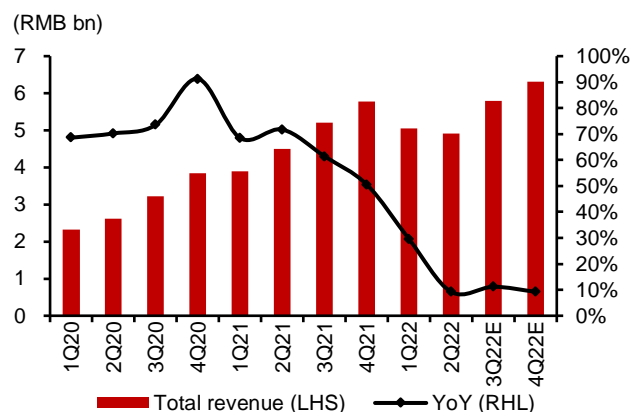
We remain prudent on Bili's 2H22E ad revenue growth outlook (+9.4% YoY), as the recovery pace of overall ad demand remains slow. We forecast ad revenue growth will reaccelerate to 29.6/23.2% and account for 25.4/27.0% of total revenue in 2023/2024E, driven by 1) recovery of overall ad demand; 2) innovation in new ad format like Story Mode; and 3) solid growth in ad budget of key verticals like games, auto and e-commerce.

Figure 9: Bili: advertising revenue



Source: Company data, CMBIGM estimates

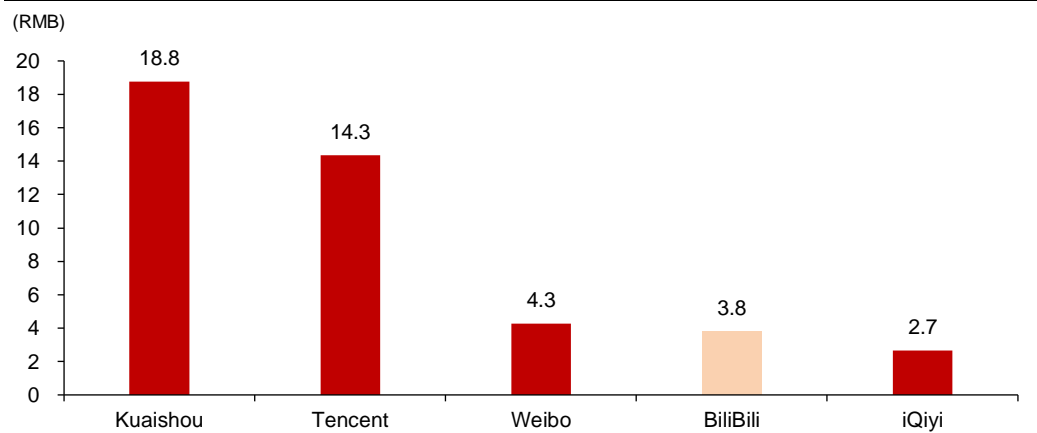
Figure 10: Bili: advertising revenue (quarterly)



Source: Company data, CMBIGM estimates

Bili's advertising revenue per MAU was RMB3.8 in 2Q22, which still has ample room for improvement compared to other social entertainment platforms (Kuaishou/Tencent/Weibo: RMB18.8/14.3/4.3). Bili needs to further enlarge user base and enhance marketing solutions to attract advertisers. The launch of short-video feed ads through its Story Mode function in 2Q22 will also improve its ad monetization efficiency in our view, given the higher eCPM and ad load potential of short-video feed ads. Therefore, in the long run, coupled with enlarged user base and increasing short-video content, Bili could have more upside to its advertising monetization potential. At current stage, it is crucial for the company to grow user base, user engagement and improving its content mix.

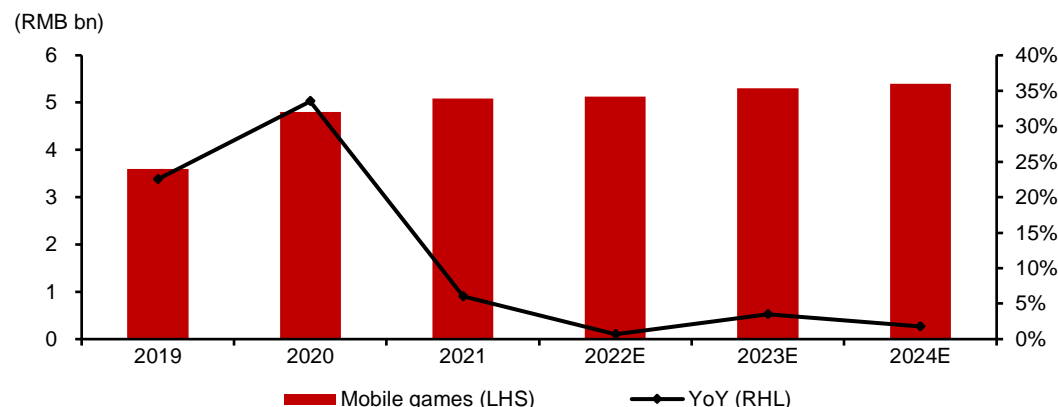
Figure 11: Advertising revenue per MAU comparison (2Q22)



Source: Company data, CMBIGM

### Mobile games (23.3% of 2022E revenue)

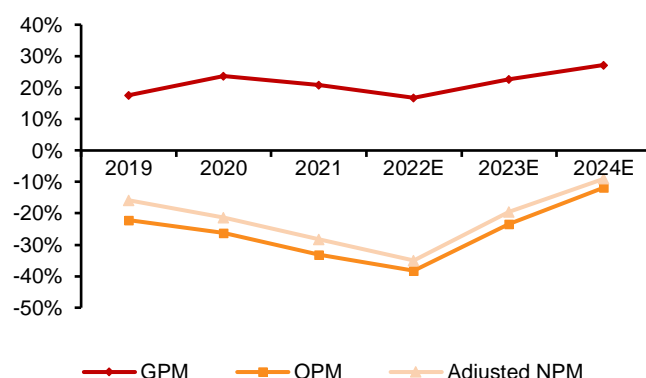
Despite the tightening game license approval in 1H22E, we expect mobile game revenue to grow 0.7% YoY in 2022E. This is mainly driven by increase in overseas revenue and the launch of new games, but partially offset by decline in certain legacy titles. In the future, Bili will focus on improving its in-house development capabilities to drive mobile games revenue growth. With 2 self-developed games planned for launch in 2H22E, we expect mobile game revenue to grow 9.5/5.1% YoY to RMB5.6/5.9bn in 2023/2024E.

**Figure 12: Bili: mobile games revenue**

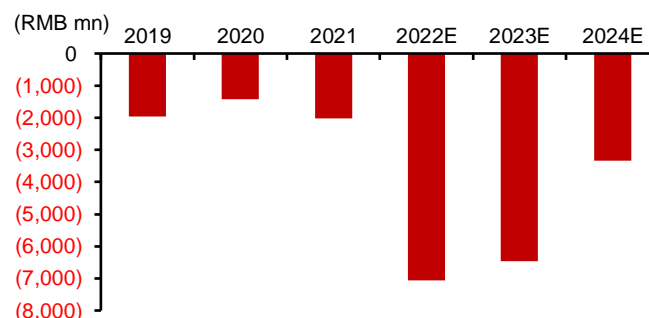
Source: Company data, CMBIGM estimates

## Growth efficiency and cash flow analysis

On the margin front, we forecast overall GPM to improve from 16.9% in 2022E to 22.5/27.7% in 2023/2024E, driven by 1) control in revenue-sharing ratio to live broadcasters; 2) better operating leverage on bandwidth and staff costs; 3) favourable revenue mix shift to higher-margin advertising business. With prudent control in opex, S&M/R&D expense ratio is expected to drop from 23.5/21.0% in 2022E to 19.5/18.0% in 2023E and 16.0/15.5% in 2024E, based on our estimates. Overall, this should drive adjusted net loss to narrow from RMB7.7bn in 2022E to RMB5.2/2.6bn in 2023/2024E.

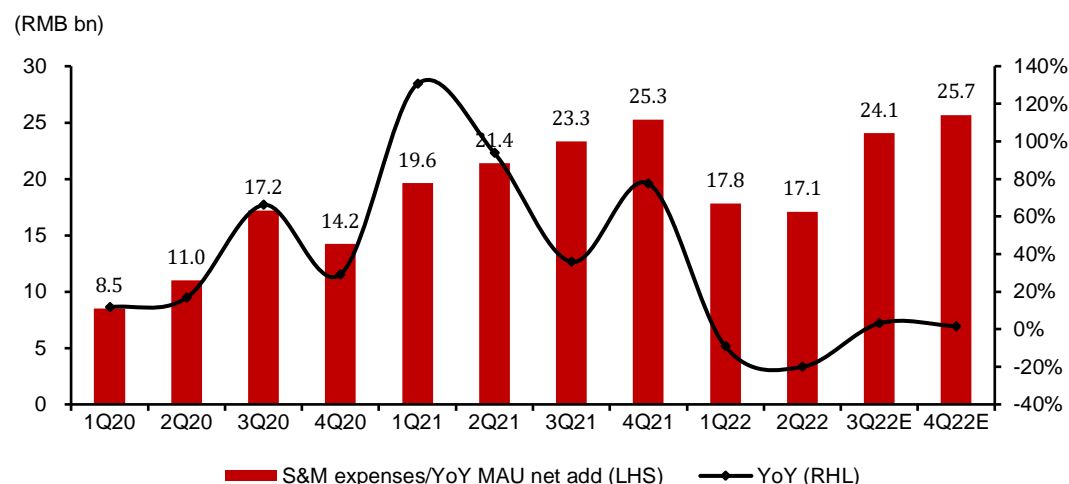
**Figure 13: Bili: margin trend**

Source: Company data, CMBIGM estimates

**Figure 14: Bili: free cash flow estimate**

Source: Company data, CMBIGM estimates

Bili's user acquisition efficiency improved in 1H22, as the competition for user traffic rationalized and user acquisition costs declined in 1H22. Internet companies became more prudent on marketing investment in 1H22, leading to lower user acquisition costs. Bili's S&M expenses divided by YoY MAU net add declined by 20% YoY to RMB17.1 in 2Q22.

**Figure 15: Bili: user acquisition efficiency**

Source: Company data, CMBIGM estimates

## Earning sensitivity analysis

Bili's total revenue growth is mostly impacted by its VAS/advertising businesses development. We conducted key factors sensitivity analysis to evaluate impact. Under our bull-case assumption, if VAS/advertising revenue growth forecast were raised by 1/3/5/8pp in 2022E and 2023E driven by better-than-expected recovery of macro environment, Bili's total revenue could have 0.5/1.6/2.6/4.2% upside in 2022E and 0.5/1.6/2.6/4.2% upside in 2023E. Under our bear-case assumption, if VAS/advertising revenue growth forecast were lowered by 1/3/5/8pp in 2022E and 2023E due to slower-than-expected recovery of macro environment, Bili's total revenue could have 0.5/1.6/2.6/4.2% downside in 2022E and 0.5/1.6/2.6/4.2% downside in 2023E.

We also conduct sensitivity analysis to analyse Bili's adjusted net loss sensitivity to its opex. Under our bull-case assumption, if total opex growth forecast were lowered by 1/3/5/8pp in 2022E and 2023E thanks to effective cost control measures, Bili's adjusted net loss could narrow by 1.1/3.4/5.7/9.2% in 2022E and by 1.9/5.7/9.6/15.3% in 2023E. Under our bear-case assumption, if total opex growth were raised by 1/3/5/8pp in 2022E and 2023E as Bili increased investment in user acquisition and product development, Bili's adjusted net loss could widen by 1.1/3.4/5.7/9.2% in 2022E and by 1.9/5.7/9.6/15.3% in 2023E.



Figure 16: Bili total revenue: sensitivity analysis

2022E (RMBmn)	Change in VAS growth forecast (2022E)	2022E VAS growth (2022E)	Change in ad growth forecast (2022E)	2022E ad growth (2022E)	Revenue	Comparison with base case
Case I	-8%	18.4%	-8%	7.4%	21,113	-4.2%
Case II	-5%	21.4%	-5%	10.4%	21,457	-2.6%
Case III	-3%	23.4%	-3%	12.4%	21,686	-1.6%
Case IV	-1%	25.4%	-1%	14.4%	21,915	-0.5%
Base case		26.4%		15.4%	22,030	0.0%
Case V	1%	27.4%	1%	16.4%	22,145	0.5%
Case VI	3%	29.4%	3%	18.4%	22,374	1.6%
Case VII	5%	31.4%	5%	20.4%	22,603	2.6%
Case VIII	8%	34.4%	8%	23.4%	22,947	4.2%

2023E (RMBmn)	Change in VAS growth forecast (2023E)	2023E VAS growth (2023E)	Change in ad growth forecast (2023E)	2023E ad growth (2023E)	Revenue	Comparison with base case
Case I	-8%	17.0%	-8%	21.6%	25,465	-4.2%
Case II	-5%	20.0%	-5%	24.6%	25,885	-2.6%
Case III	-3%	22.0%	-3%	26.6%	26,164	-1.6%
Case IV	-1%	24.0%	-1%	28.6%	26,444	-0.5%
Base case		25.0%		29.6%	26,584	0.0%
Case V	1%	26.0%	1%	30.6%	26,724	0.5%
Case VI	3%	28.0%	3%	32.6%	27,003	1.6%
Case VII	5%	30.0%	5%	34.6%	27,283	2.6%
Case VIII	8%	33.0%	8%	37.6%	27,702	4.2%

Source: Company data, CMBIGM estimates

Figure 17: Bili adjusted net income: sensitivity analysis

2022E (RMBmn)	Change in opex yoy growth	S&M expense yoy growth	R&D expense yoy growth	Implied S&M expense ratio	Implied R&D expense ratio	2022E adjusted NPM	2022E Net profit	Comparison with base case
Case I	-8%	-18.7%	54.9%	21.4%	20.0%	-31.7%	(6,980)	9.2%
Case II	-5%	-15.7%	57.9%	22.2%	20.4%	-32.9%	(7,244)	5.7%
Case III	-3%	-13.7%	59.9%	22.7%	20.6%	-33.7%	(7,420)	3.4%
Case IV	-1%	-11.7%	61.9%	23.2%	20.9%	-34.5%	(7,596)	1.1%
Base case		-10.7%	62.9%	23.5%	21.0%	-34.9%	(7,685)	0.0%
Case V	1%	-9.7%	63.9%	23.8%	21.1%	-35.3%	(7,773)	-1.1%
Case VI	3%	-7.7%	65.9%	24.3%	21.4%	-36.1%	(7,949)	-3.4%
Case VII	5%	-5.7%	67.9%	24.8%	21.6%	-36.9%	(8,125)	-5.7%
Case VIII	8%	-2.7%	70.9%	25.6%	22.0%	-38.1%	(8,389)	-9.2%

2023E (RMBmn)	Change in opex yoy growth	S&M expense yoy growth	R&D expense yoy growth	Implied S&M expense ratio	Implied R&D expense ratio	2023E adjusted NPM	2023E Net profit	Comparison with base case
Case I	-8%	-7.9%	-4.6%	17.9%	16.6%	-16.7%	(4,430)	15.3%
Case II	-5%	-4.9%	-1.6%	18.5%	17.1%	-17.8%	(4,730)	9.6%
Case III	-3%	-2.9%	0.4%	18.9%	17.5%	-18.5%	(4,930)	5.7%
Case IV	-1%	-0.9%	2.4%	19.3%	17.8%	-19.3%	(5,130)	1.9%
Base case		0.1%	3.4%	19.5%	18.0%	-19.7%	(5,230)	0.0%
Case V	1%	1.1%	4.4%	19.7%	18.2%	-20.1%	(5,330)	-1.9%
Case VI	3%	3.1%	6.4%	20.1%	18.5%	-20.8%	(5,530)	-5.7%
Case VII	5%	5.1%	8.4%	20.5%	18.9%	-21.6%	(5,730)	-9.6%
Case VIII	8%	8.1%	11.4%	21.1%	19.4%	-22.7%	(6,030)	-15.3%

Source: Company data, CMBIGM estimates



## SOTP Valuation

Based on the SOTP valuation, our target price for Bili is US\$20.0 per ADS, which implies 2.1/1.8x 2022E/2023E PS. Our target price of US\$20.0 includes:

1) US\$7.9 for the advertising business (39.5% of the total valuation), based on a 13x net income of advertising business at stabilized and enlarged user-base stage (2024E). The target PE multiple is at a premium to the average PE of the mature advertising platforms (6x 2024E PE), to reflect Bili's unique value proposition in video advertising market.

2) US\$6.5 for mobile games (32.3% of the total valuation), based on a 12x net income of mobile games business at mature stage (2024E). The target PE multiple has a discount over the industry average (13x 2024E PE), as Bili has yet to establish successful track record in in-house games development.

3) US\$5.3 for the VAS business (26.2% of the total valuation), based on a 1.1x VAS revenue at mature stage (2024E). The target PS multiple is on par with the average PS of other mature video platforms.

4) US\$0.4 for e-commerce (2.0% of the total valuation), based on a 0.3x e-commerce revenue at stabilized and enlarged user-base stage (2024E). The target PS multiple is on par with the average PS of the mature e-commerce platforms.

**Figure 18: Bili: SOTP Valuation**

(RMBmn)	2024E MAU	Revenue per MAU	2024E revenue	Net margin (%)	Target PS (x)	Target PE (x)	Target valuation	As of total valuation
VAS (Live streaming + Membership)	445.9	29.3	13,081		1.1		14,389	26.2%
- Live streaming	66.9	119.4	7,987					
- Membership	445.9	11.4	5,094					
Advertising	445.9	18.7	8,329	20%		13	21,656	39.5%
Mobile games	44.6	132.3	5,900	25%		12	17,699	32.3%
E-commerce	22.3	160.2	3,571		0.3		1,071	2.0%
<b>Total valuation (RMBmn)</b>							<b>54,815</b>	
Number of ADS (mn)							394	
<b>Valuation per ADS (US\$)</b>							<b>20.0</b>	

Note: Live streaming/mobile games/e-commerce MAU is based on 15/10/5% penetration of total MAUs

Source: Company data, CMBIGM estimates

Figure 19: Revenue per MAU comparison

(RMBmn)	2021 live streaming revenue	4Q21 MAU	Revenue per MAU
Kuaishou	30,995	578.0	53.6
TME	19,777	175.0	113.0
Huya	10,186	85.4	119.3
Momo	8,379	114.1	73.4
<b>Average</b>			<b>89.8</b>
<b>Bilibili in 2024E</b>	<b>7,845</b>	<b>66.9</b>	<b>117.3</b>
	2021 membership revenue	4Q21 MAU	Revenue per MAU
iQiyi	16,714	498.6	33.5
Mango TV	3,688	209.8	17.6
TME	11,467	615.0	18.6
<b>Average</b>			<b>23.2</b>
<b>Bilibili in 2024E</b>	<b>5,094</b>	<b>445.9</b>	<b>11.4</b>
	2021 ad revenue	4Q21 MAU	Revenue per MAU
Kuaishou	42,665	578.0	73.8
Weibo	12,788	573.0	22.3
iQiyi	7,067	498.6	14.2
<b>Average</b>			<b>36.8</b>
<b>Bilibili in 2024E</b>	<b>8,103</b>	<b>445.9</b>	<b>18.2</b>
	2021 games revenue	4Q21 MAU	Revenue per MAU
XD Inc	2,011	16.7	120.5
Tencent	174,300	1,268.2	137.4
<b>Average</b>			<b>129.0</b>
<b>Bilibili in 2024E</b>	<b>5,395</b>	<b>44.6</b>	<b>121.0</b>
	2021 e-commerce revenue	4Q21 MAU	Revenue per MAU
JD	951,592	569.7	1,670
Vipshop	117,060	93.9	1,247
<b>Average</b>			<b>1,458</b>
<b>Bilibili in 2024E</b>	<b>3,892</b>	<b>22.3</b>	<b>174.6</b>

Source: Company data, CMBIGM

Figure 20: Peer comparison: online games and advertising sector

Companies	Ticker	Price	EPS growth (YoY %)			PE (x)		
		(Local)	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
Online games								
NetEase	NTES US	57.3	(1)	15	11	13	11	10
Activision Blizzard	ATVI US	72.5	(23)	34	7	25	19	17
Electronic Arts	EA US	127.7	3	9	11	18	15	14
Take Two Interactive	TTWO US	125.0	(4)	63	18	26	15	13
IGG	799 HK	2.2	(147)	(170)	48	na	14	9
iDreamSky	1119 HK	3.2	(137)	257	57	na	15	9
Nexon	3659 JP	2,480.0	(7)	11	16	21	18	16
Nintendo	7974 JP	5,985.0	(9)	(6)	(4)	17	18	18
Bandai Namco	7832 JP	9,749.0	7	3	11	21	21	19
Perfect World	002624 CH	11.5	349	27	16	14	10	9
37 games	002555 CH	14.1	14	14	13	9	9	7
Average PE						18	15	13
Online advertising								
Weibo	WB US	11.3	(27)	14	18	4	4	3
Baidu	BIDU US	81.2	(6)	19	11	10	9	8
Meta	Meta US	137.5	(14)	15	15	10	9	8
Twitter	TWTR US	52.8	343	(51)	104	65	na	na
Average PE						22	7	6

Note: data as at the 25 October market close; all data based on Bloomberg consensus estimates

Source: Bloomberg, CMBIGM

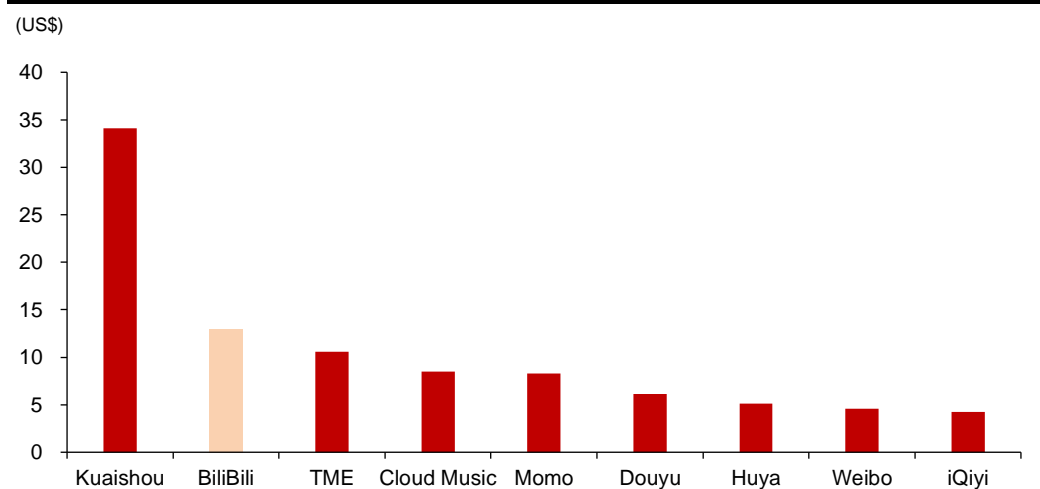
**Figure 21: Peer comparison: online video and first-party e-commerce**

		Price	Revenue growth (YoY %)			PS (x)		
Companies	Ticker	(Local)	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
Online video								
iQiyi	IQ US	2.2	(13.4)	6.5	6.2	0.4	0.4	0.4
Mango Excellent Media	300413 CH	20.8	(4.7)	16.5	14.6	2.4	2.1	1.8
Average PS						1.4	1.2	1.1
First-party e-commerce								
JD	JD US	37.8	4.1	16.1	14.8	0.4	0.4	0.3
Vipshop	VIPS US	7.1	(16.9)	7.9	7.6	0.3	0.3	0.3
Average PS						0.4	0.3	0.3

Note: data as at the 25 October market close; all data based on Bloomberg consensus estimates

Source: Bloomberg, CMBIGM

Bili's current market cap per MAU is US\$13.0, which is a premium over the sector average of US\$10.5 and is only lower than that of Kuaishou. We believe the premium is justified by Bili's ample for user growth and monetization improvement, compared to the other platforms.

**Figure 22: Social entertainment platforms: market cap/MAU comparison**

Note: data as at the 25 October market close

Source: Bloomberg, CMBIGM

## Financial Summary

INCOME STATEMENT	2019A	2020A	2021A	2022E	2023E	2024E
YE 31 Dec (RMB mn)						
Revenue	6,778	11,999	19,384	22,030	26,584	30,880
Cost of goods sold	5,588	9,159	15,341	18,314	20,607	22,332
Gross profit	1,190	2,840	4,043	3,717	5,976	8,548
Operating expenses	2,685	5,981	10,472	12,117	12,229	12,043
Selling expense	1,199	3,492	5,795	5,177	5,184	4,941
Admin expense	593	976	1,838	2,313	2,260	2,316
R&D expense	894	1,513	2,840	4,626	4,785	4,786
Operating profit	(1,495)	(3,141)	(6,429)	(8,400)	(6,252)	(3,495)
Investment gain/loss	97	28	(194)	(626)	167	175
Other gains/(losses)	15	137	(5)	391	0	0
EBIT	(1,384)	(2,975)	(6,628)	(8,635)	(6,085)	(3,320)
Interest income	163	83	70	152	89	92
Interest expense	(47)	(109)	(155)	(168)	(168)	(476)
Pre-tax profit	(1,268)	(3,001)	(6,713)	(8,652)	(6,163)	(3,704)
Income tax	36	53	95	173	123	74
After tax profit	(1,304)	(3,054)	(6,809)	(8,825)	(6,286)	(3,778)
Minority interest	15	47	20	18	126	76
Others	0	(4)	0	0	0	0
Net profit	(1,289)	(3,012)	(6,789)	(8,807)	(6,161)	(3,702)
Adjusted net profit	(1,067)	(2,560)	(5,478)	(7,685)	(5,230)	(2,622)

BALANCE SHEET	2019A	2020A	2021A	2022E	2023E	2024E
YE 31 Dec (RMB mn)						
Current assets	10,324	15,740	36,447	30,983	33,795	35,709
Cash & equivalents	4,963	4,678	7,523	1,058	1,111	1,242
Account receivables	745	1,218	1,382	1,492	2,877	3,342
Prepayment	1,511	1,766	4,848	5,510	6,649	7,724
ST bank deposits	1,845	4,720	7,632	7,861	8,097	8,340
Other current assets	1,261	3,357	15,061	15,061	15,061	15,061
Non-current assets	5,193	8,126	15,606	15,905	16,746	17,316
PP&E	516	762	1,350	1,611	1,812	1,976
Investment in JVs & assos	1,251	2,233	5,503	5,207	5,507	5,682
Intangibles	1,657	2,357	3,836	3,988	4,100	4,137
Goodwill	1,012	1,296	2,338	2,338	2,338	2,338
Other non-current assets	756	1,478	2,580	2,761	2,989	3,183
Total assets	15,517	23,866	52,053	46,888	50,541	53,024
Current liabilities	4,273	7,392	12,071	14,773	17,523	19,502
Short-term borrowings	0	100	1,232	1,232	1,232	1,232
Account payables	1,904	3,074	4,361	6,272	7,057	7,648
Tax payable	0	100	1,232	1,232	1,232	1,232
Other current liabilities	1,793	2,880	2,613	3,044	4,390	5,195
Accrued expenses	576	1,238	2,633	2,993	3,612	4,195
Non-current liabilities	3,608	8,692	18,266	18,428	24,562	27,687
Long-term borrowings	3,415	8,341	17,784	17,784	23,784	26,784
Other non-current liabilities	193	351	482	644	777	903
Total liabilities	7,880	16,083	30,337	33,201	42,085	47,190
Share capital	0	0	0	0	0	0
Capital surplus	10,718	14,616	35,930	35,930	35,930	35,930
Retained earnings	(4,146)	(7,175)	(13,971)	(22,019)	(27,375)	(30,072)
Other reserves	480	159	(255)	(255)	(255)	(255)
Total shareholders equity	7,052	7,600	21,704	13,656	8,300	5,603
Minority interest	584	182	12	30	156	231
Total equity and liabilities	15,517	23,866	52,053	46,888	50,541	53,024

CASH FLOW	2019A	2020A	2021A	2022E	2023E	2024E
<b>YE 31 Dec (RMB mn)</b>						
<b>Operating</b>						
Profit before taxation	(1,268)	(3,001)	(6,713)	(8,652)	(6,163)	(3,704)
Depreciation & amortization	192	327	539	370	462	532
Tax paid	36	53	95	173	123	74
Change in working capital	223	1,487	(9)	1,930	227	439
Others	1,012	1,887	3,442	3,680	3,473	3,873
<b>Net cash from operations</b>	<b>195</b>	<b>753</b>	<b>(2,647)</b>	<b>(2,498)</b>	<b>(1,878)</b>	<b>1,214</b>
<b>Investing</b>						
Capital expenditure	(1,565)	(2,239)	1,756	(3,233)	(3,472)	(3,646)
Acquisition of subsidiaries/ investments	(1,380)	(1,757)	(6,716)	(330)	(133)	0
Others	(1,013)	(4,911)	(19,618)	(410)	(463)	(437)
<b>Net cash from investing</b>	<b>(3,958)</b>	<b>(8,907)</b>	<b>(24,578)</b>	<b>(3,973)</b>	<b>(4,069)</b>	<b>(4,083)</b>
<b>Financing</b>						
Net borrowings	3,398	5,695	11,203	0	6,000	3,000
Proceeds from share issues	1,648	2,817	19,288	0	0	0
Others	33	(177)	(103)	0	0	0
<b>Net cash from financing</b>	<b>5,079</b>	<b>8,335</b>	<b>30,389</b>	<b>0</b>	<b>6,000</b>	<b>3,000</b>
<b>Net change in cash</b>						
Cash at the beginning of the year	3,540	4,963	4,678	7,523	1,058	1,111
Exchange difference	108	(466)	(319)	6	0	0
<b>Cash at the end of the year</b>	<b>4,963</b>	<b>4,678</b>	<b>7,523</b>	<b>1,058</b>	<b>1,111</b>	<b>1,242</b>
GROWTH	2019A	2020A	2021A	2022E	2023E	2024E
<b>YE 31 Dec</b>						
Revenue	64.2%	77.0%	61.5%	13.7%	20.7%	16.2%
Gross profit	39.1%	138.6%	42.4%	(8.1%)	60.8%	43.0%
PROFITABILITY	2019A	2020A	2021A	2022E	2023E	2024E
<b>YE 31 Dec</b>						
Gross profit margin	17.6%	23.7%	20.9%	16.9%	22.5%	27.7%
Operating margin	(22.1%)	(26.2%)	(33.2%)	(38.1%)	(23.5%)	(11.3%)
Adj. net profit margin	(15.7%)	(21.3%)	(28.3%)	(34.9%)	(19.7%)	(8.5%)
Return on equity (ROE)	(18.4%)	(41.1%)	(46.3%)	(49.8%)	(56.1%)	(53.3%)
GEARING/LIQUIDITY/ACTIVITIES	2019A	2020A	2021A	2022E	2023E	2024E
<b>YE 31 Dec</b>						
Net debt to equity (x)	(0.2)	0.5	0.5	1.3	2.9	4.8
Current ratio (x)	2.4	2.1	3.0	2.1	1.9	1.8
Receivable turnover days	40.1	37.1	26.0	24.7	39.5	39.5
Payable turnover days	124.4	122.5	103.8	125.0	125.0	125.0
VALUATION	2019A	2020A	2021A	2022E	2023E	2024E
<b>YE 31 Dec</b>						
P/B	5.1	12.4	10.8	2.1	3.4	5.1

Source: Company data, CMBIGM estimates. Note: The calculation of net cash includes financial assets.

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