

Huya Inc. (HUYA US)

Game streaming leader with eSports tailwinds

We expect Huya to benefit from eSport tailwinds with solid growth, backed by its premium licensed and produced content, well-established talent agencies, and high user engagement. We forecast Huya to deliver 13%/ 15% rev/ earnings CAGR in FY20-23E, and strong momentum in 2H21E with new game titles and e-sports tournament pipelines. Market concerns of the pending merger and competition have been well priced in, in our view. Suggest move into 2H21E momentum and further visibility on merger. Initiate with BUY and DCF-based TP of US\$23.8.

- Game streaming leader with superior user engagement.** According to Intelligence Research Group, Huya is China's Top 1 game streaming platform, with 13% share in the pan-entertainment live streaming industry (based on our estimates in 2020). Huya recorded higher 1Q21 MAUs (75.5mn vs. 59.1mn) and ARPPU (RMB469 vs. RMB286) than Douyu, albeit a lower paying ratio (7.8% vs. 11.8%). We believe Huya is well-positioned to benefit from eSports tailwinds, with high user engagement and new initiatives expansion (e.g., game video), despite the heightened competition.
- Eyes on 2H21E momentum and e-sports season.** While game streaming tapered off in 1Q21 with regulatory overhang and seasonality, we anticipate strong user and rev momentum in 2H21E for upcoming new game launches and e-sports finals. Backed by Huya's premium pipeline of licensed and in-house events, we forecast Huya's mobile MAU/ live streaming rev to deliver 17%/ 19% CAGR in 2020-23E, with stable paying ratio and ARPPU.
- New initiatives to unlock longer-term TAM.** Huya's cloud gaming (YOWA) and game companion (Xiaolupeiwán) biz enrich broadcaster-fan interactions. We believe new biz will boost user metrics, and further diversify its monetization in the long run. We estimate other rev to make up 8% rev mix in 2023E (vs. 6% in 2020), mainly driven by rising sublicensing, and ads. We expect content investment to weigh on FY21E margin, while long-term profitability remains intact, for narrowing loss from overseas biz, content cost leverage, scale effect and potential merger. Overseas biz trends well (rev doubled YoY in 1Q21) and is expected to contribute 4% in FY21E.
- Initiate with BUY.** We set our DCF-based TP at US\$23.8 (implying 27x FY22E P/E), in line with industry average. Further catalysts may come from potential merger, new blockbuster games, e-sports tailwinds and well-executed new initiatives.

Earnings Summary

(YE 31 Dec)	FY19A	FY20A	FY21E	FY22E	FY23E
Revenue (RMB mn)	8,374.5	10,914.4	12,268.0	14,046.9	15,802.8
YoY growth (%)	79.6	30.3	12.4	14.5	12.5
Adj. net income (RMB mn)	749.9	1,261.5	768.9	1,398.1	1,897.8
Adj. EPS (RMB)	3.23	5.29	3.15	5.59	7.41
YoY growth (%)	17.0	63.6	-40.5	77.6	32.6
Consensus EPS (RMB)	NA	NA	3.16	6.03	7.99
P/E (x)	33.3	20.3	34.2	19.2	14.5
P/S (x)	3.0	2.4	2.1	1.9	1.7
Yield (%)	0.0	0.0	0.0	0.0	0.0
ROE (%)	8.6	12.9	7.3	11.7	13.7
Net gearing (%)	Net cash	Net cash	Net cash	Net cash	Net cash

Source: Company data, CMBIS estimates, Bloomberg

BUY (Initiation)

Target Price	US\$23.8
Up/Downside	+42.0%
Current Price	US\$16.7

China Internet Sector

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Stock Data

Mkt Cap (US\$ mn)	3,950
Avg 3 mths t/o (US\$ mn)	56.51
52w High/Low (US\$)	36.33/ 14.32
Total Issued Shares (mn)	84

Source: Bloomberg

Shareholding Structure

Leading Glory Inv	42.22%
Taurus Holding	14.15%
Glesason Global	10.70%

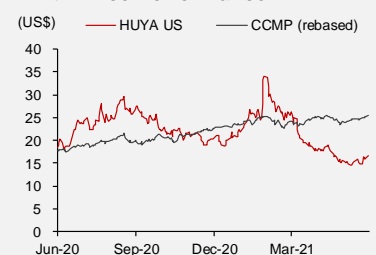
Source: Bloomberg

Share Performance

	Absolute	Relative
1-mth	7.3%	1.7%
3-mth	-36.5%	-40.4%
6-mth	-17.2%	-27.4%

Source: Bloomberg

12-mth Price Performance



Source: Bloomberg

Auditor: PwC

Please cast your valuable vote for CMBIS research team in the 2021 Asiamoney Brokers Poll:

<https://euromoney.com/brokers>

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Investment Thesis

Game streaming leader with superior user engagement.

According to Intelligence Research Group, Huya is China's Top 1 game streaming platform, with 13% share in the pan-entertainment live streaming industry (based on our estimates in 2020). Huya recorded higher 1Q21 MAUs (75.5mn vs. 59.1mn) and ARPPU (RMB469 vs. RMB286) than Douyu, albeit a lower paying ratio (7.8% vs. 11.8%). We believe Huya is well-positioned to benefit from eSports tailwinds, with high user engagement and new initiatives expansion (e.g., game video), despite the heightened competition.

Eyes on 2H21E momentum and e-sports season.

While game streaming tapered off in 1Q21 with regulatory overhang and seasonality, we anticipate strong user and rev momentum in 2H21E for upcoming new game launches and e-sports finals. Backed by Huya's premium pipeline of licensed and in-house events, we forecast Huya's mobile MAU/ live streaming rev to deliver 17%/ 19% CAGR in 2020-23E, with stable paying ratio and ARPPU.

New initiatives to unlock longer-term TAM.

Huya's cloud gaming (YOWA) and game companion (Xiaolupeiwan) biz enrich broadcaster-fan interactions. We believe new biz will boost user metrics, and further diversify its monetization in the long run. We estimate other rev to make up 8% rev mix in 2023E (vs. 6% in 2020), mainly driven by rising sublicensing, and ads. We expect content investment to weigh on FY21E margin, while long-term profitability remains intact, for narrowing loss from overseas biz, content cost leverage, scale effect and potential merger. Overseas biz trends well (rev doubled YoY in 1Q21) and is expected to contribute 4% in FY21E.

Initiate with BUY.

We set our DCF-based TP at US\$23.8 (implying 27x FY22E P/E), in line with industry average. Further catalysts may come from new blockbuster games, e-sports tailwinds, well-executed new initiatives, and potential merger.

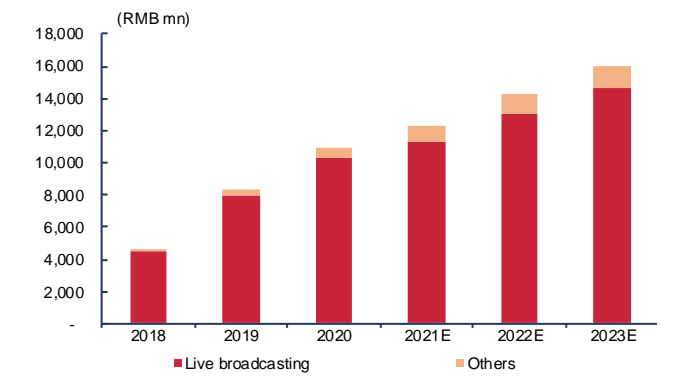
Focus Charts

Figure 1: Overview of Huya



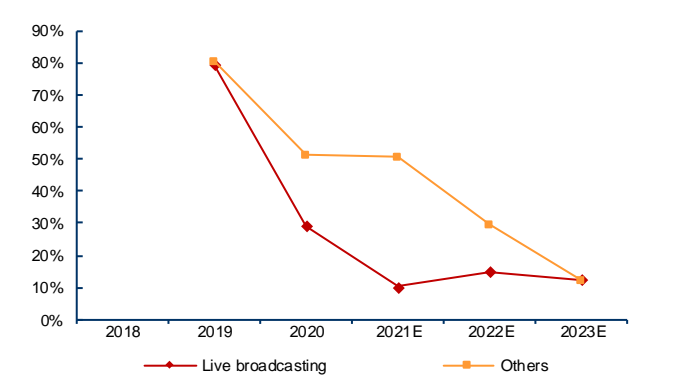
Source: Company data, Frost & Sullivan. Note refers to Figure 6

Figure 2: Rev estimates



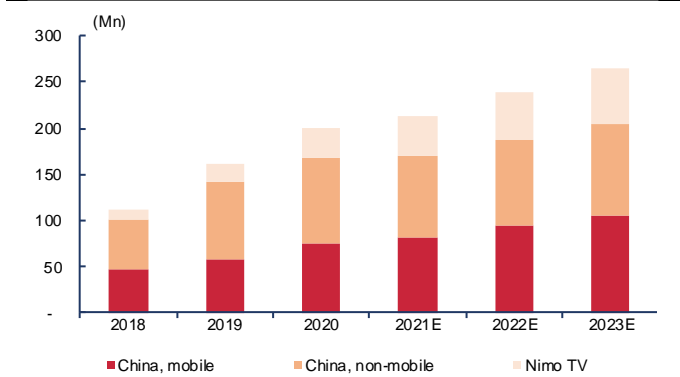
Source: Company data, CMBIS estimates

Figure 3: Rev growth breakdown



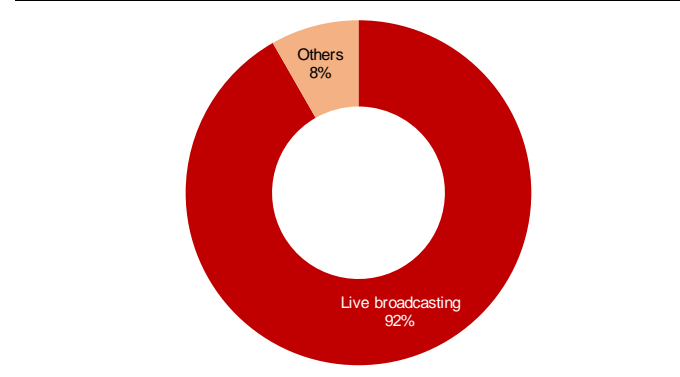
Source: Company data, CMBIS estimates

Figure 4: MAUs estimates



Source: Company data, CMBIS estimates

Figure 5: FY22E revenue breakdown



Source: Company data, CMBIS estimates

Company Overview

Game streaming leader with high user engagement

China's leading game live streaming platform

Founded in 2016, Huya is China's Top 1 game live streaming platform, according to Intelligence Research Group. Huya primarily generates revenue from live streaming (93.1% in 1Q21), with incremental rev from ad, sublicensing, and others. Huya reached RMB10.9bn/ RMB2.6bn rev in 2020/ 1Q21, +30.3%/ +8.0% YoY.

Beyond China, Huya also expanded into SEA, and Latin America with its Huya platform and Nimo TV. On its game-centric live streaming platform, Huya broadcasts world-class e-sports tournaments and high-quality self-made events. Huya also launched Xiaolupeiwan (小鹿陪玩) and YOWA in 2020, tapping into the fast-growing game companion and cloud gaming markets.

Huya's vibrant ecosystem fuels the rapid growth of users and broadcasters. As of 4Q20, Huya had 528k broadcasters managed by agencies (+43.9% YoY) and 178.5mn China MAUs (+18.8% YoY). Huya's mobile MAU was 79.5mn (+29.1% YoY) in 4Q20 and 75.5mn (+1.1% YoY) in 1Q21, with soft 1Q21 attributed to the high base and delay of new games.

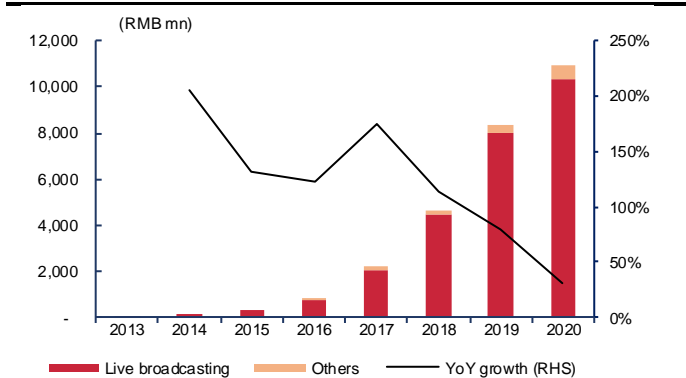
Figure 6: Overview of Huya



Source: Company data, Intelligence Research Group, iResearch

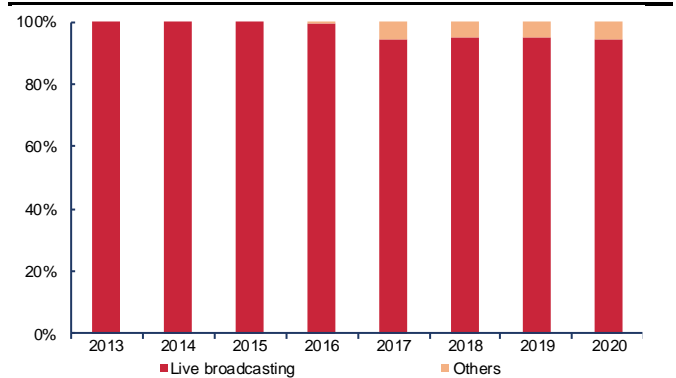
Note: 1) As of 1H20; 2) estimated in 2020; 3) at the end of 2020; 4) broadcasters managed by agencies

Figure 7: Huya's revenue trend



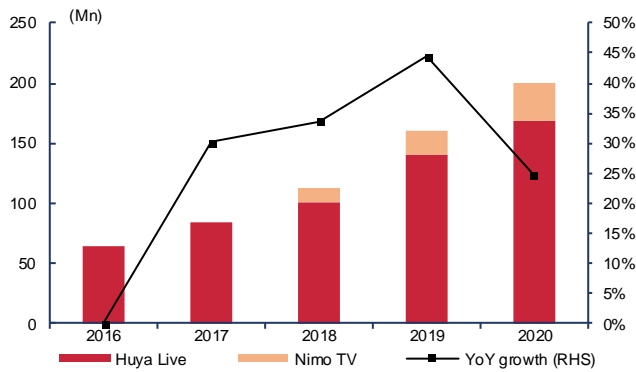
Source: Company data

Figure 8: Huya's revenue mix trend



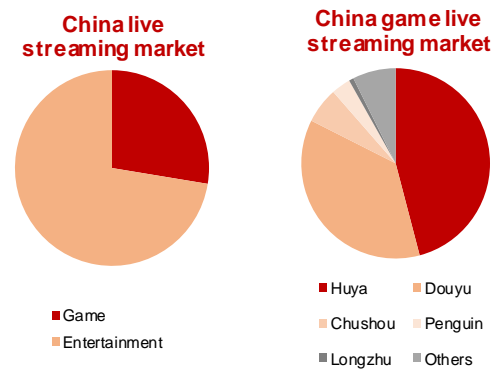
Source: Company data

Figure 9: Huya's global MAUs trend



Source: Company data

Figure 10: China live streaming market landscape



Source: Intelligence Research Group (1H20), iResearch (2020)

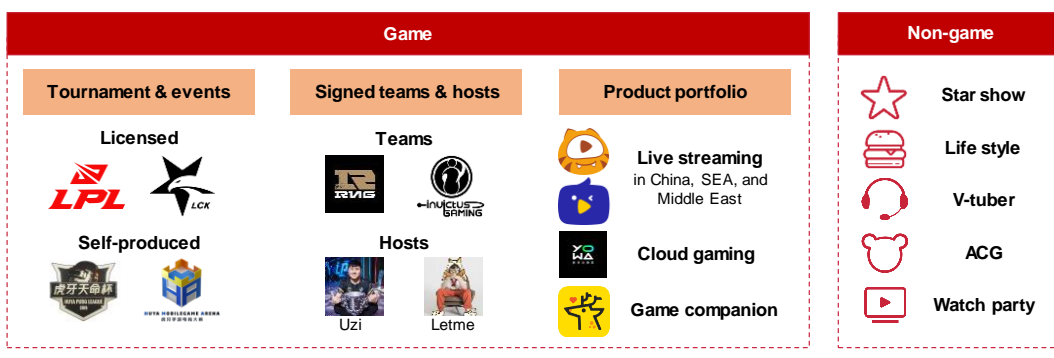
Established game-centric entertainment ecosystem

As a game-centric streaming platform, Huya's core competence lies in its premium and exclusive content. In 1Q21, Huya broadcasted 92 licensed e-sports tournaments and 36 self-produced events, which generated 535mn/ 195mn viewership, +41%/ +73% YoY, respectively. Huya's recent deal with TJ Sports secured premium e-sports in its pipeline, including LPL, LDL, and LPL All Star.

Huya excels itself with diverse broadcaster base. Huya signed well-known e-sports teams (e.g., RNG and IG) & professional players (e.g., UZI and Letme), and offers supporting programs to grassroots streamers. With its cloud gaming and game companion initiatives, Huya's broadcasters have enriched ways to engage with their viewers and build solid fan base.

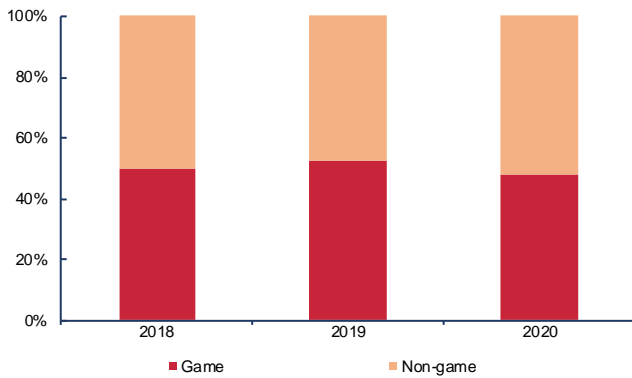
Starting as a game-centric platform, Huya has been developing more non-game content to diversify offerings and ramp up monetization. Non-game broadcasters have quickly gained popularity on Huya, evidenced by their heightened contribution in top rankings. In 2020, Huya's non-game content contributed for 21% of viewership and 50% of live streaming revenue, according to our estimates.

Figure 11: Huya's game-oriented product portfolio



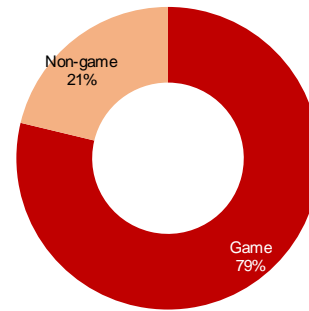
Source: Company data

Figure 12: Game/non-game live streaming revenue



Source: Company data, CMBIS

Figure 13: Game/non-game viewership in 2020



Source: Intelligence Research Group, iResearch

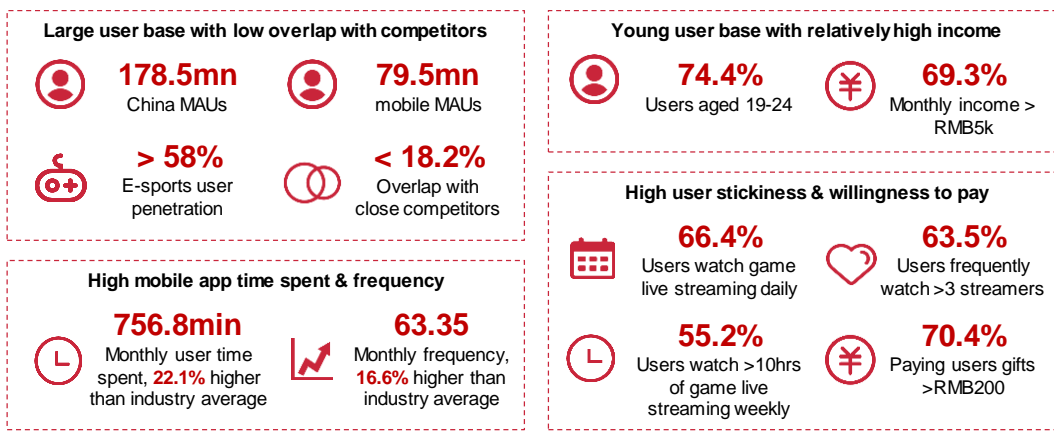
Unique proposition with sizable loyal user base

Huya attracts sizable loyal user base with premium content and vibrant ecosystem. As of 1Q21, Huya maintained a next-month retention rate of over 70% on its Huya Live app. According to iResearch, Huya Live app's monthly user time and opening frequency are 22.1% and 16.6% higher than the industry average.

Huya recorded higher 1Q21 MAUs (75.5mn vs. 59.1mn) and ARPPU (RMB469 vs. RMB286) than Douyu, albeit a lower paying ratio (7.8% vs. 11.8%). Considering its new initiatives (e.g., game video), we expect Huya to maintain high user engagement with 30%+ DAU/MAU and 70%+ next-month retention, despite the heightened competition.

According to iResearch, Huya only has 18.2% user overlap with its top competitors: 1) closest competitor: Douyu (DOYU US), with MAU at 192mn in 1Q21 (mobile MAU at 59mn); and 2) pan-entertainment players: Kuaishou and Bilibili.

Figure 14: Huya's operating metrics in 2020



Source: iResearch, as of 2020

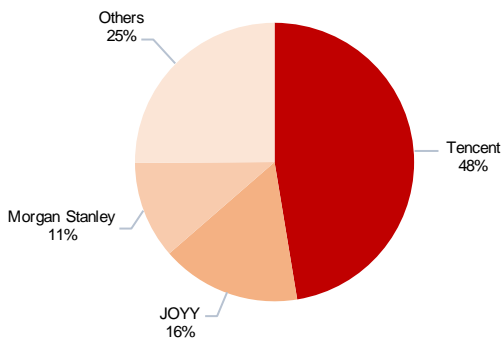
Leveraging strong relationship with Tencent

Tencent became Huya's controlling shareholder after it acquired US\$810mn shares from JOYY (YY US) in 2020. As of 31 Mar 2021, Tencent held 47.4% of Huya's shares and 69.7% of its voting right. As Tencent is China's largest game developer and distributor, we see vast operating synergies between Tencent and Huya in game IP/livestreaming monetization, cloud gaming and eSports initiatives.

Huya has leveraged Tencent's SNS for cross-platform experience and precise targeting. As of 4Q20, Huya had 20mn MAUs (not counted in Huya Live's MAUs) that came from Tencent channels, such as WeGame, WeChat Game Center, and QQ Game Center. Tencent Game also collaborated with Huya for innovative promotion campaigns, as it launched in-game voice packages for two of Huya's top-tier broadcasters.

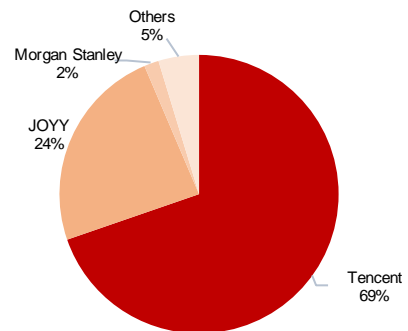
Huya's latest cooperation with Tencent includes the licensing deal with Tengjing Sports and interactive gameplay for Peacekeeper Elite. We believe Huya can unlock its TAM with further synergies in cloud gaming (Tencent Cloud) and game distribution (Tencent Game).

Figure 15: Huya's shareholding structure



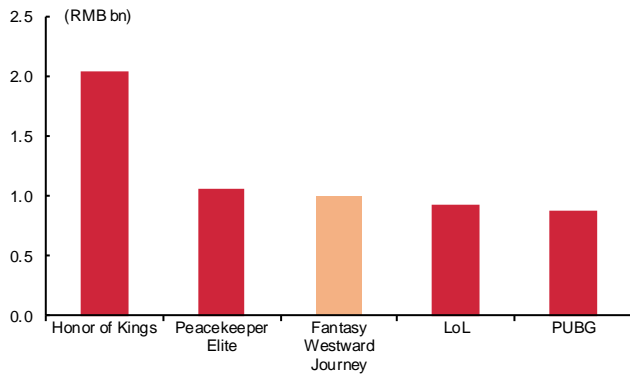
Source: Company data, 31 Mar 2021

Figure 16: Huya's voting right structure



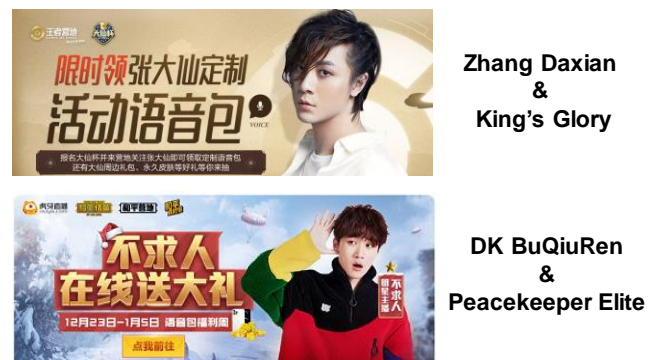
Source: Company data, 31 Mar 2021

Figure 17: Top 5 Chinese games by live streaming gifting in 2020



Source: Xiaohulu
Note: Tencent's games are denoted in red

Figure 18: Tencent Games offering voice packages of Huya's top hosts



Source: Company data

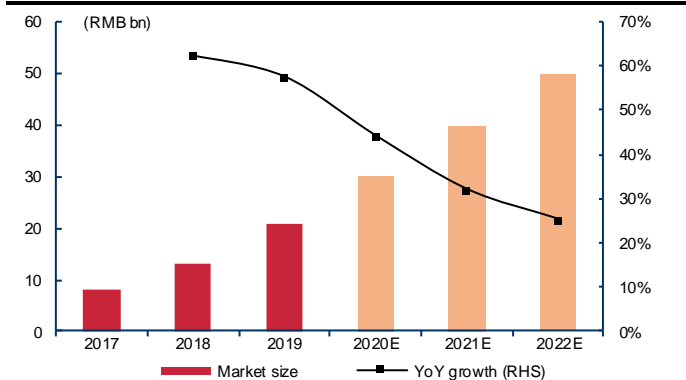
Investment Summary

Effective user expansion with premium content & diverse broadcasters

Riding on the industry growth with e-sports tailwinds

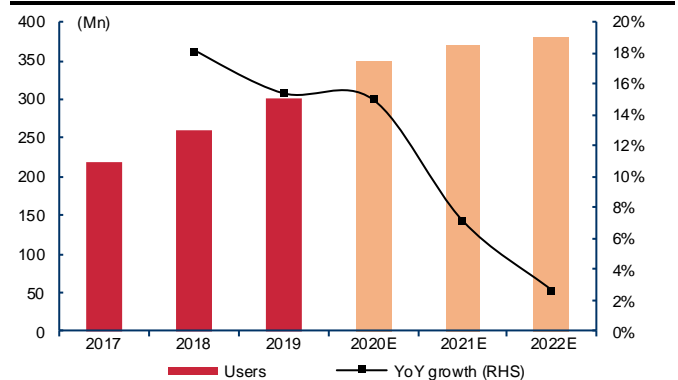
While China's online population growth hits saturation, iResearch forecasted 29% 2020-22E CAGR for the game live streaming market, driven by an increasing paying ratio and diversifying monetization scenarios. We believe game live streaming is more defensive against emerging entertainment formats than entertainment live streaming, given that e-sports gained rising tractions among Gen Z.

Figure 19: Game live streaming industry expected to deliver 29% rev CAGR 2020-22E



Source: iResearch

Figure 20: ... Despite the soft 4% user CAGR with China's online population growth near saturation



Source: Company data

We expect the game live streaming market to be boosted by upcoming highly-anticipated new games. In particular, we expect Huya's MAU to expand with the potential release of LoL Mobile and DnF Mobile, thanks to Huya's early preparation, possible collaboration with Tencent, and strong seasonality in the summer vacation period.

Figure 21: Games expected to receive more live streaming hype in 2H21E

Game Title	Developer/ China distributor	Type	Game status (China region)
LoL Mobile	Tencent	MOBA	Beta tested in May 2021
DNF Mobile	Tencent	MMORPG	Pre-register
COD Mobile	Tencent	FPS	Launched in Dec 2020
CFHD	Tencent	FPS	Scheduled 10 Jun 2021
Valorant	Tencent	FPS	Pre-register
Battle Teams2	Wizard Games	FPS	Pre-register
Brawl Stars	Yoozoo	Battle arena	Launched in Jun 2020
Naraka: Bladepoint	24 Entertainment	Battle arena	Steam playtested in Apr 2021
Legends of Runeterra	Tencent	Card	-
Yu-Gi-Oh! Duel Links	NetEase	Card	Launched in Jan 2021

Source: iResearch, CMBIS, as of 31 May 2021

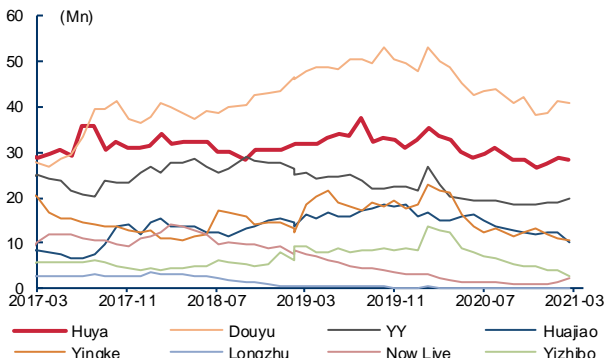
Huya demonstrates superior user stickiness among game live streaming peers. We believe Huya is well-positioned to surf industry tailwinds with its leading position in the game live streaming vertical. While Douyu has higher MAUs and DAUs, Huya has been closing the gap in DAUs and also takes the lead in the DAU/MAU ratio and daily time spent by DAUs, suggesting higher user stickiness.

Huya defends emerging players with premium content and popular broadcasters.

Huya also faces rising competition from Bilibili (exclusive OWL broadcasting rights in 2021) and Kuaishou (game live streaming/ short video MAUs > 220mn/ 300mn in Jul 2020). With Huya's extensive investment in e-sports tournament rights and its popular broadcasters

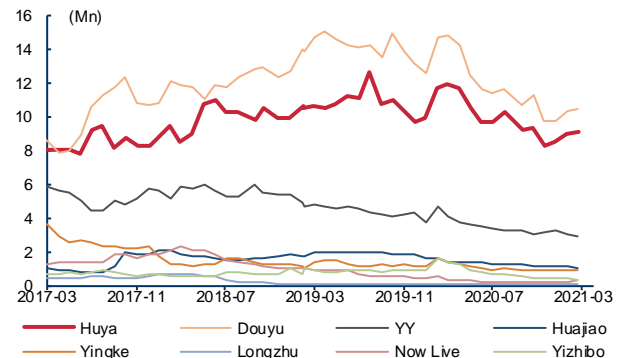
(measured by either gift billings or bullet chats), we believe Huya is defensive against uprising new players.

Figure 22: Chinese live streaming, mobile MAUs



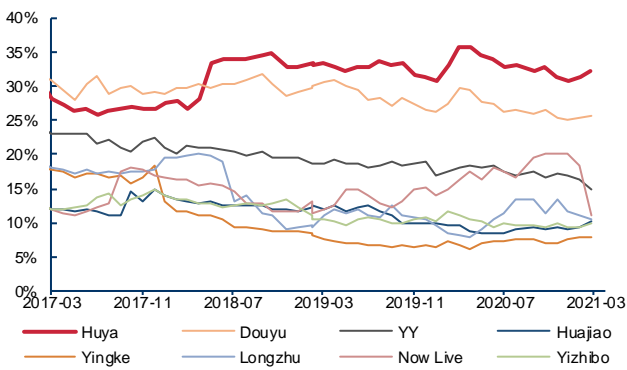
Source: QuestMobile
Note: Online consider mobile MAUs (45% of 4Q20 Huya MAUs)

Figure 23: Chinese live streaming, mobile DAUs



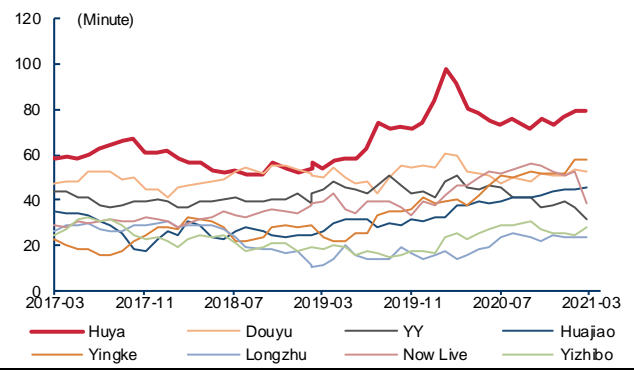
Source: QuestMobile

Figure 24: Chinese live streaming, mobile DAU/MAU



Source: QuestMobile

Figure 25: Chinese live streaming, daily time spent per mobile DAU



Source: QuestMobile

Strengthening leadership through premium and proprietary content

Huya has strong e-sports tournament pipeline in 2021E, supporting its user growth. Notably, Huya signed a five-year rights deal of LPL, LDL, and LPL All-star with Tengjing Sports in 2021. We believe this deal will underpin Huya's user momentum, given that Newzoo ranked LoL as the world's most popular e-sports title in 2020.

Huya enhances its content offerings with leading production capabilities, as its self-produced content viewership reached 5.42mn per event in 1Q21 (vs. licensed content's 5.82mn). Huya launched 36 self-made gaming and entertainment events in 1Q21, with viewership up 73% YoY to 195mn (vs. licensed content's 535mn viewership, +41% YoY).

With Huya's continuous dedication to proprietary content, we expect Huya to see: 1) increased user engagement with more broadcaster-fan exhibition games (水友赛); 2) benefit from new game titles to gain traction; and 3) reduced content cost in the long term.

Figure 26: Huya's world-class e-sports pipeline in 2021E

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
LoL													
LPL		9 Jan - 28 Mar, 1-18 Apr				5 Jun - 19 Jul, 13-23 Aug, 28-30 Aug							
LCK	13 Jan - 28 Mar, 31 Mar - 10 Apr					17 Jun - 23 Aug, 26 Aug - 5 Sep, 7-9 Sep							
LCS		5 Feb - 14 Mar, 20 Mar - 11 Apr				4 Jun - 1 Aug, 7 - 29 Aug							
LEC	22 Jan - 14 Mar, 26 Mar - 11 Apr					12 Jun - 9 Aug, 21 Aug - 6 Sep							
MSI					6 - 23 May								
Honor of Kings													
KPL			11-21 Mar, 28 Mar - 31 May, 3-20Jun						16 Sep - 22 Nov, 26 Nov - 6 Dec				
KGL		18 Jan - 29 May							15 Sep - 2 Dec				
Peacekeeper Elite / PUBG													
PEL	~26 Jan		11 Mar - 18 Apr, 22-29 Apr, 30 Apr - 13 Jun						25 Sep - 18 Oct				
PCL				13 Apr - 23 May									
CrossFire													
CFPL	13 Jan - 17 Apr					19 May to 8 Aug							
CFML	13 Jan - 17 Apr					19 May to 7 Aug							
CFEL				17 Apr - 13 Jun				11 Jul - 12 Sep					
CS: GO													
UCC S9				17 Apr - 14 May									
EPL S13			8 Mar - 11 Apr						1 Sep - 10 Oct				
Dota 2													
DPC	4 Jan - 13 Jun												

Source: Company data

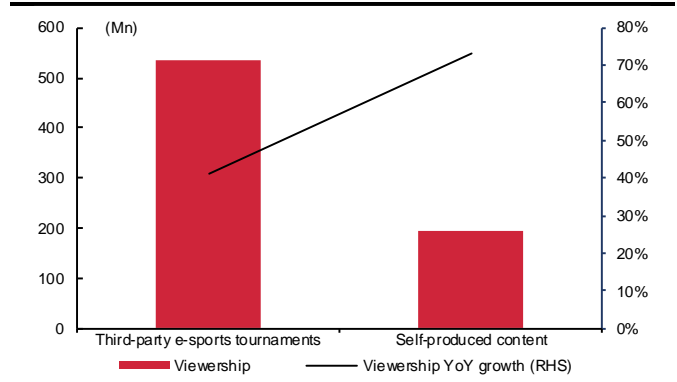
Note: Confirmed tournaments denoted in orange; unannounced schedules estimated with last year's timeline

Figure 27: Huya MSI live streaming rerun with highlight moments on the progress bar



Source: Huya.com

Figure 28: Huya's 1Q21 licensed and self-produced event viewership



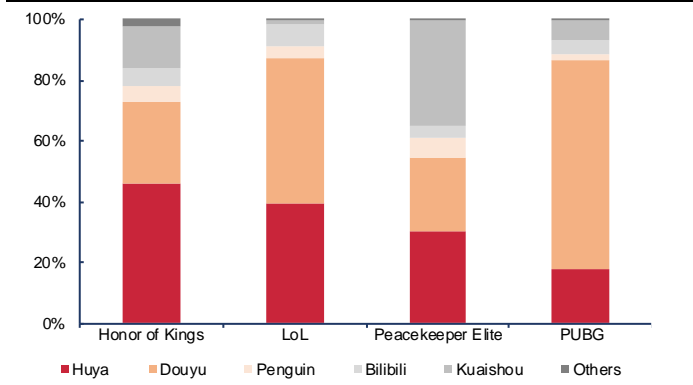
Source: Company data

High agency penetration among diverse broadcasters

Huya has transparent, mature agencies to manage broadcasters, and its talent agencies/ managed broadcasters grew 17%/ 44% YoY to 2,800/ 528,000 in 2020. Due to increasing supply and stricter regulation on poaching, we expect more rational competitive landscape for broadcasters with lower sign-up bonuses and longer contract periods.

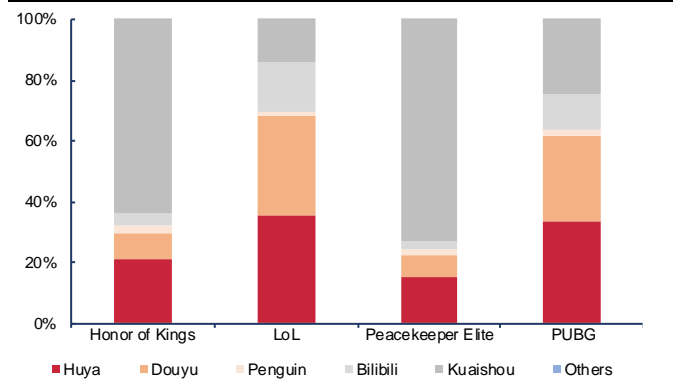
For peer comparison, Huya has higher share of top-tier mobile game streamers, such as Honor of Kings <王者荣耀> and Peacekeeper Elite <和平精英>, while Douyu focuses more on PC games. Moreover, Huya performed better in agency operation, and Huya's broadcasters tend to be more diversified and less concentrated on the top ones.

Figure 29: Broadcasters by platform, in terms of gift billings in 2020



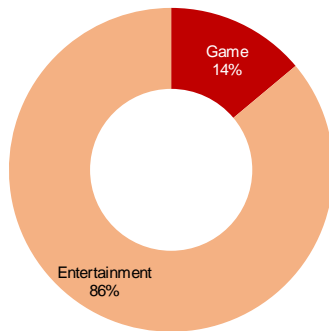
Source: Xiaohulu

Figure 30: Broadcasters by platform, in terms of bullet chat volume in 2020



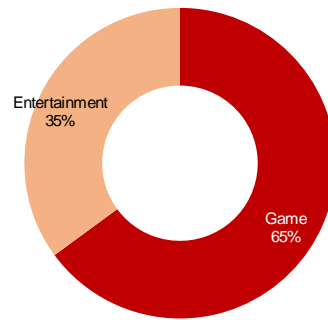
Source: Xiaohulu

Figure 31: Top 100 Huya broadcastcers by Apr 2021 billings



Source: Xiaohulu

Figure 32: Top 100 Huya broadcastcers by Apr 2021 bullet chats volume



Source: Xiaohulu

Figure 33: Top 10 broadcastcers on Huya, Douyu, Bilibili, and Kuaishou in Apr 2021

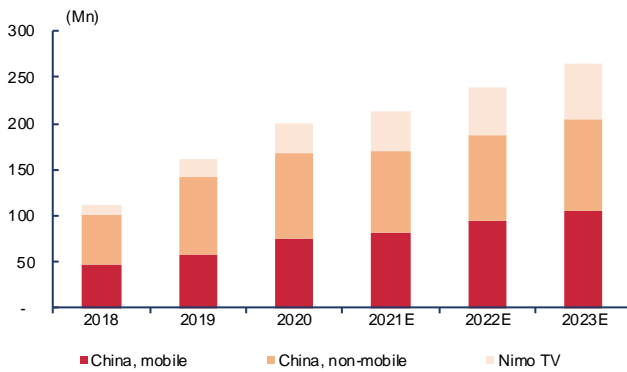
Huya		Douyu		Bilibili		Kuaishou		
Rank	Type	Billings	Type	Billings	Type	Billings	Type	
1	Game	6.23	Entertainment	4.52	Game	2.13	Entertainment	7.48
2	Entertainment	6	Entertainment	4.06	Entertainment	1.66	Entertainment	4.36
3	Entertainment	5.08	Entertainment	4.03	Entertainment	1.63	Entertainment	3.16
4	Entertainment	4.34	Entertainment	3.97	Game	1.42	Entertainment	3.14
5	Entertainment	4.06	Entertainment	3.94	Entertainment	1.21	Entertainment	2.91
6	Entertainment	3.86	Entertainment	3.92	Entertainment	1.13	Entertainment	2.78
7	Entertainment	3.4	Entertainment	3.78	Entertainment	1	Entertainment	2.65
8	Entertainment	3.35	Entertainment	3.42	Entertainment	0.96	Entertainment	2.47
9	Entertainment	2.89	Entertainment	3.42	Game	0.92	Entertainment	2.3
10	Entertainment	2.77	Entertainment	2.97	Entertainment	0.85	Entertainment	2.3

Huya		Douyu		Bilibili		Kuaishou		
Rank	Type	Bullet chats	Type	Bullet chats	Type	Bullet chats	Type	
1	Game	12.9	Game	11.16	Game	2.15	Entertainment	4.46
2	Game	12.39	Game	5.83	Game	2.13	Entertainment	2.43
3	Game	4.36	Game	3.04	Game	2.02	Entertainment	2.19
4	Entertainment	4.07	Game	2.65	Game	1.30	Entertainment	1.91
5	Game	2.88	Game	2.6	Game	1.30	Entertainment	1.86
6	Game	2.81	Game	2.49	Entertainment	1.18	Entertainment	1.68
7	Game	2.8	Game	2.46	Game	1.02	Entertainment	1.67
8	Game	2.05	Game	2.31	Game	1.00	Entertainment	1.56
9	Game	2.02	Game	2.19	Game	1.00	Entertainment	1.5
10	Game	1.97	Game	2.19	Game	0.88	Entertainment	1.38

Source: Xiaohulu

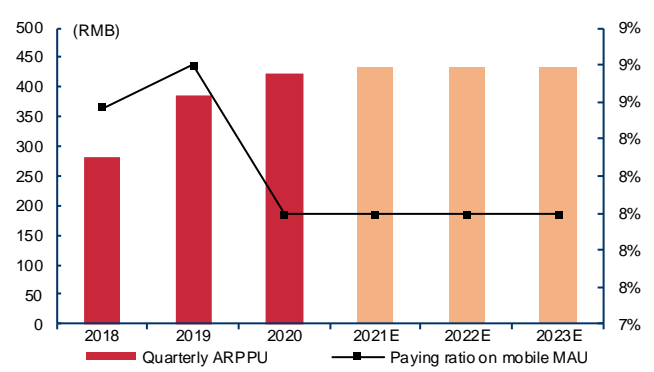
We expect Huya’s mobile MAUs to deliver 17% CAGR in 2020-23E to 104.8mn, driven by industry tailwinds and premium content. We anticipate Huya to see flat paying ratio with incremental rise in ARPPU, factoring in competition from emerging platforms.

Figure 34: Mobile MAUs estimates



Source: Company data, CMBIS estimates

Figure 35: ARPPU & paying ratio estimates



Source: Company data, CMBIS estimates

Unlocking longer-term TAM with new initiatives

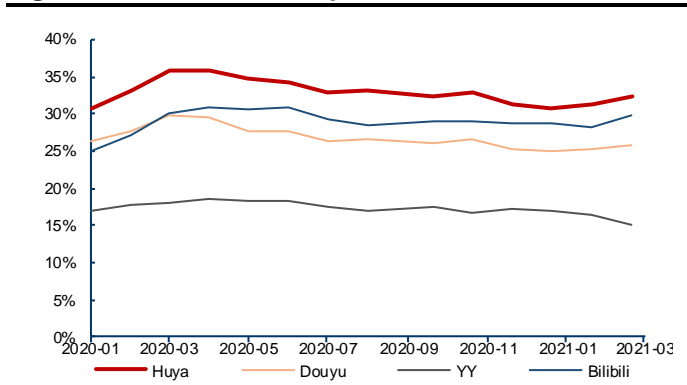
Continuous video integration to boost user engagement

Huya has been integrating video content on its platform, with video viewership +40% YoY in 4Q20. We believe video content is natural extension of Huya’s live streaming ecosystem, as users can watch videos to revisit highlight moments or missed streaming sessions.

We expect Huya’s video integration to strengthen its user engagement. Huya’s next-month retention rate remains >70% in 1Q21, and its DAU/ MAU and opening frequency are higher than peers (according to Analysys). Similar to its global peer Twitch, Huya mainly provides video content in broadcaster profiles, which may better balance community tonality and the video initiative.

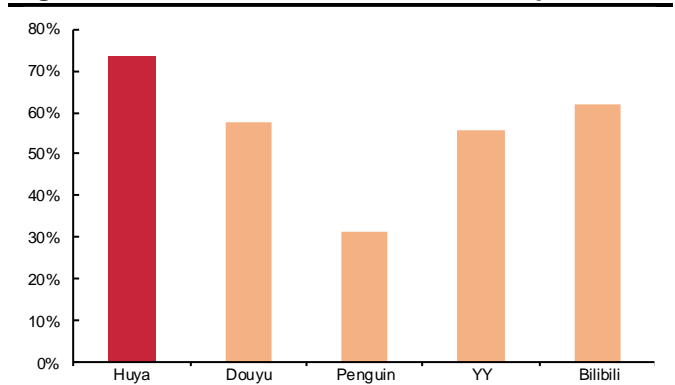
We expect Huya to focus on user engagement with its video initiative in the short term, and to potentially ramp up ad revenue in the long term with enriched scenarios. As of 2020, Huya’s other revenue (ad, sublicensing, and others) contributed only 6% of the total revenue, while Twitch ad contributed c.20% in 2020 (estimated with data from The Information and Nielsen SuperData). Video monetization is still at very early stage, but with large potential.

Figure 36: DAU/MAU comparison



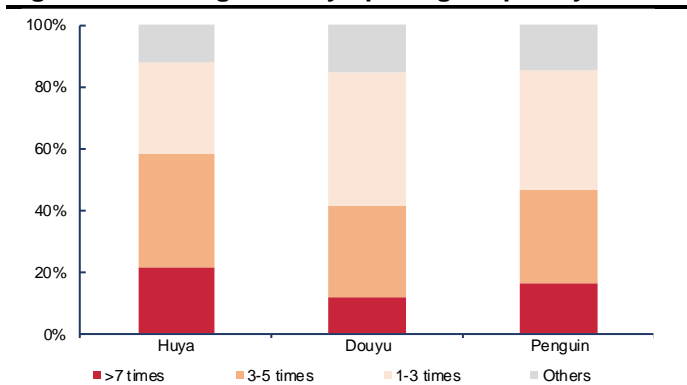
Source: QuestMobile

Figure 37: Next-month retention rate comparison



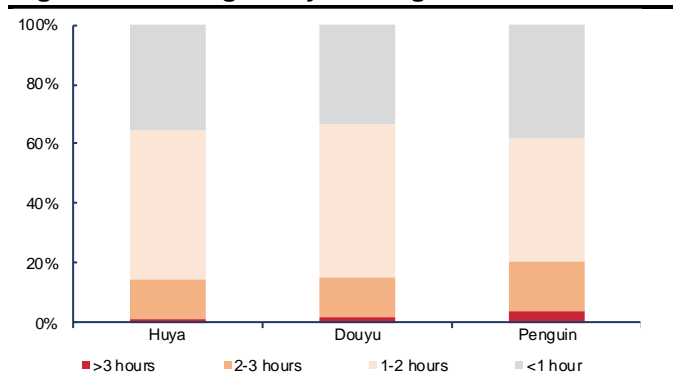
Source: Analysys, Company data
Note: Huya’s data as of 1Q21; other companies as of 1H20

Figure 38: Average weekly opening frequency



Source: iiMedia

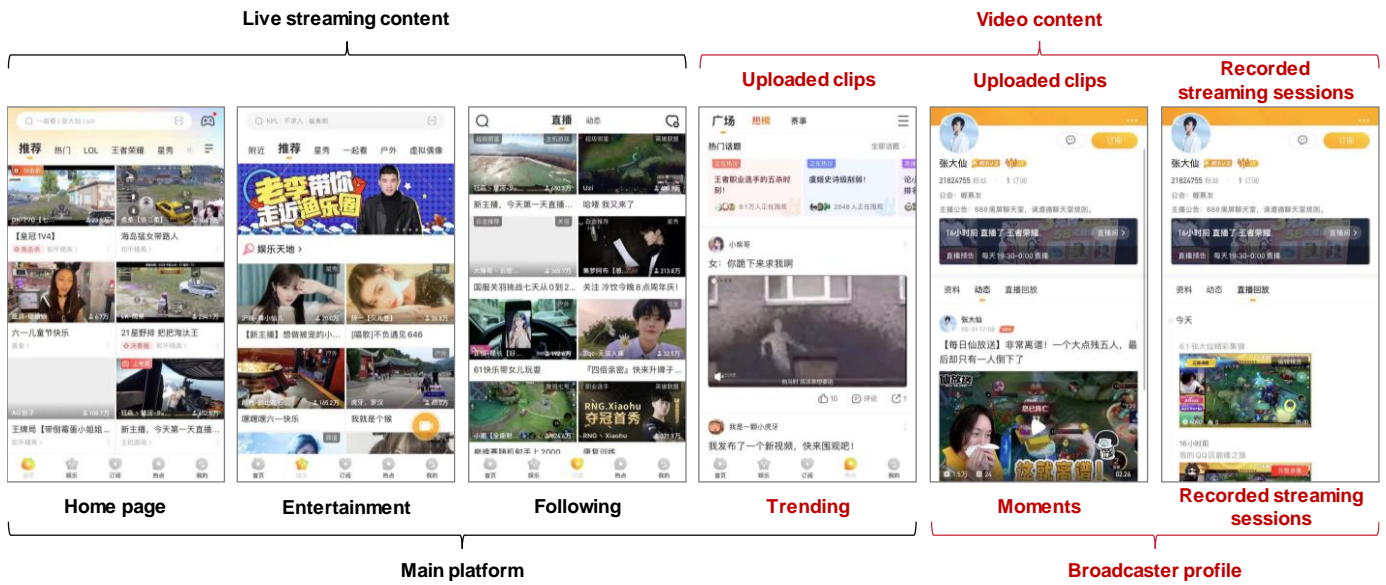
Figure 39: Average daily viewing time



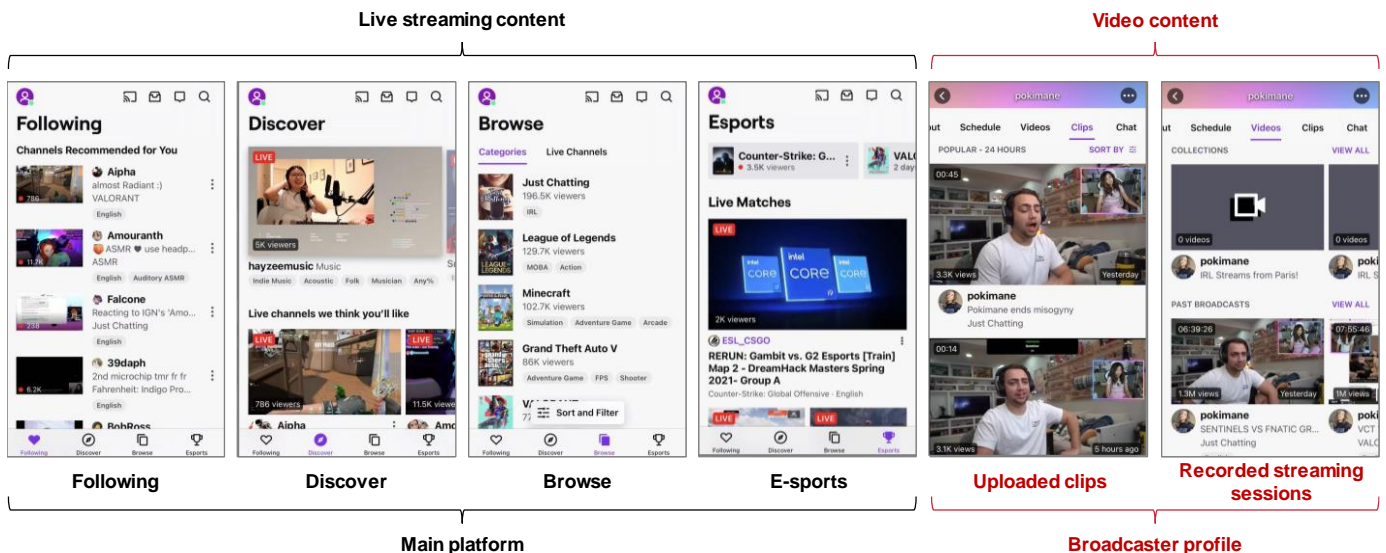
Source: iiMedia

Figure 40: Video and live streaming content distribution on Huya Live and Twitch apps

Huya Live



Twitch



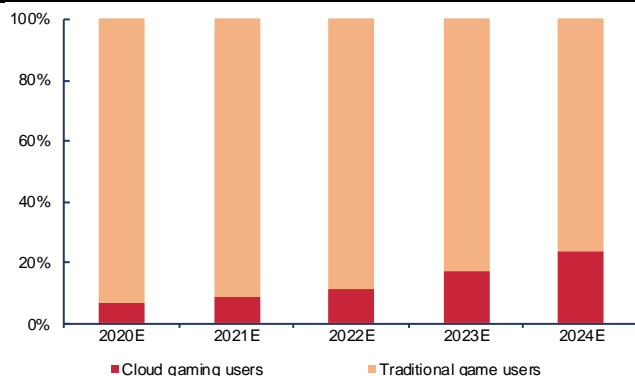
Source: Huya Live app, Twitch app

YOWA: integrating cloud gaming and live streaming

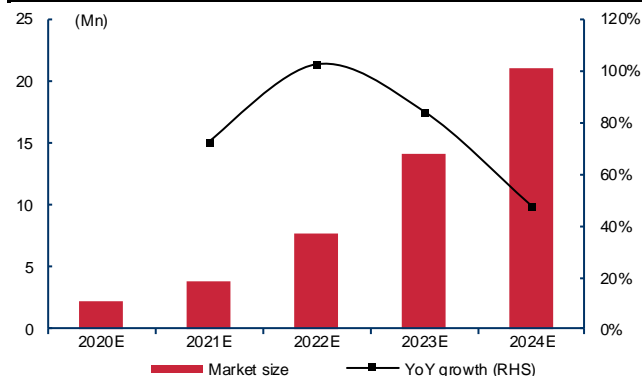
Huya unlocks cloud gaming with by launching YOWA in 2020. Newzoo forecasts the cloud gaming market will grow at 101% 2020-23E CAGR to US\$5.1bn (vs. e-sport's US\$1.6bn), and China will outpace at 135% CAGR. We expect cloud gaming to benefit from 5G implementation and game premiumization, while user experience (latency, control precision, and resolution) and willingness to pay will be the major challenges.

We think YOWA differentiates from domestic peers in that: 1) high resolution and low latency based on its "5G+Cloud+X" technology; 2) pioneering mobile adaption (e.g., virtual mouse & gamepad, macros); and 3) live streaming integration, as fans can play games with broadcasters in the same screen (Peacekeeper Elite interactive feature enabled in Mar 2021).

While cloud gaming is still at its nascent stage in China, we expect YOWA to continuously boost Huya's user engagement. In 4Q20, YOWA streamed sought-for titles and reached average daily user time of 90 mins. Considering international peers, we believe cloud gaming can be Huya's next leg of growth if executed well, with further integration with live streaming and Tencent Cloud.

Figure 41: Cloud gaming user penetration


Source: iResearch, Mar 2021

Figure 42: Cloud gaming market size


Source: iResearch, Mar 2021

Figure 43: Comparison of cloud gaming platforms

Company	Description	Price	Games	Platform
Huya's YOWA	Nov 2020, China	Free; pay for games on original platforms	c.130 games (30%/70% PC/mobile)	Android, iOS, PC, web
Microsoft's xCloud	Sep 2020, Europe & US	US\$14.99/month (Xbox Game Pass Ultimate)	100+ rotating PC/ console games, access to EA Play	Android; 2021 spring: iOS & PC
Google's Stadia	Nov 2019, North America & Europe	Pay for games; Pro US\$9.99/month	c. 100 games with c. 400 games in the pipeline	iOS, android, TV, PC and Mac
Nvidia's GeForce Now	Feb 2020, widest geo coverage	Pay for games; Priority US\$9.99/month	2,000+ games streamed by collaborating publishers	iOS, android, TV, PC, Mac ...
Amazon's Luna	Oct 2020, US	US\$5.99/month; US\$14.99/month to access Ubisoft+	c. 70 Luna games and 100+ Ubisoft+ games	iOS, android, FireTV, PC, Mac
Tencent's START, XianYou & Jiwan	Mar 2019 - Apr 2020, China	Free	c. 110 mobile games on XianYou	TV, mobile, PC, Mac
China Mobile's MiguPlay	Jun 2019, China	RMB29.9/month; RMB15.9/ 5hrs playtime	c.250 mobile/ PC/ console games	Android, PC, TV, VR

Source: iResearch, CMBIS

Figure 44: Overview of cloud gaming market development in China and abroad

Drivers

- **No hardware constraint:** save money on PC/console purchase; play and resume games anytime; cross-terminal gameplay
- **Better gaming experience:** explore larger, more detailed games with more concurrent players
- **5G implementation:** stable network connection with low latency and high bandwidth

Technology

- **Network connection:** game fluency is dependent on network connection and 5G implementation
- **Cloud computing and edge computing:** cloud gaming experience is dependent on such technology advancement
- **Mobile adaption:** optimize the control and resolution of PC/ console games on mobile devices

Challenges

- **5G implementation delay:** pandemic and geopolitical risks
- **Lack of premium games:** limited resources of playable premium games in China vs. international cloud gaming platforms' strategic cooperation with game producers
- **Willingness to pay:** Chinese users are more accustomed to free-to-play games

Commercialization

- **Subscription:** e.g., Xbox Game Pass Ultimate & EA Play, Stadia/ Luna & Ubisoft+
- **Ad + live streaming:** attract traffic with cloud gaming and monetize through other business
- **Interactive ad and game demos:** synergies between cloud gaming and digital ad/ game distribution

Source: Newzoo, Tencent Research Institute, CMBIS

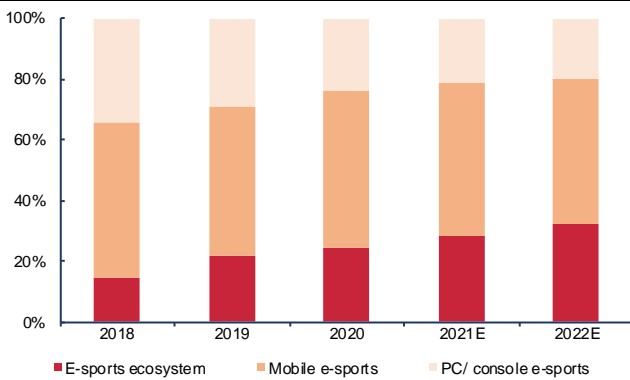
Diversifying revenue from game companion, e-commerce, and overseas products

Huya ventured into multiple markets, including game companion, overseas products and e-commerce. We expect Huya’s game companion app, Xiaolupeiwan (小鹿陪玩), to boost user engagement and diversify rev mix. According to iResearch, e-sports ecosystem (24% of which is sparring) will make up an increasing portion of e-sports market in 2020-22E.

We see potential operating synergies between cloud gaming and Xiaolupeiwan. Xiaolupeiwan differentiates itself with its abundant supply of broadcasters as game companion partners. As cloud gaming eliminates the hardware restriction, fans can easily play with broadcasters on the YOWA platform.

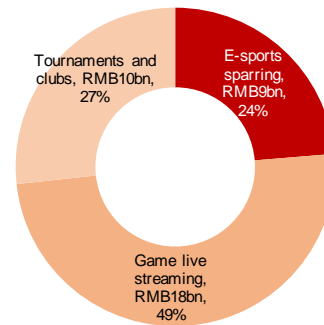
In terms of overseas expansion, Huya’s Nimo TV, launched in 2018, is tapping into game live streaming in SEA, Latin America, and Middle East. In 1Q21, its overseas rev doubled YoY, with narrowing loss (and some countries may reach breakeven point).

Figure 45: Segment growth of China e-sports



Source: iResearch

Figure 46: China e-sports ecosystem market, 2020



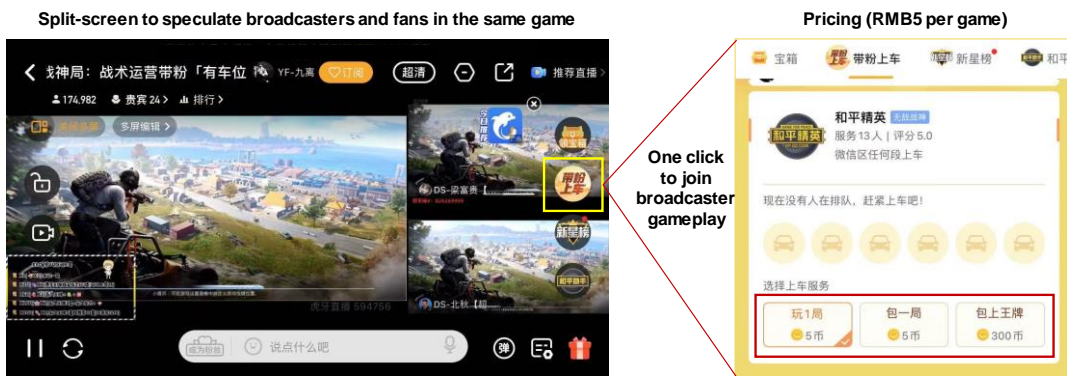
Source: iResearch

Figure 47: Comparison of cloud gaming platforms

Platform	Business	User metrics
Xiaolupeiwan	Game companion	<ul style="list-style-type: none"> Single-digit revenue, smaller than audio streaming 8.19mn MAU¹
TT Yuyin	Voice-based game SNS	<ul style="list-style-type: none"> Accumulated users > 100mn, 50mn+ registered users in 2020 (+66% YoY)
Bixin	Game companion leader	<ul style="list-style-type: none"> 7mn+ registered game companions in 2020 (+75% YoY) Accumulated game companion rev >RMB20bn Average monthly salary of RMB7,905/RMB2,951 for full-time/part-time game companions

Source: Analysys, Bixin. 1) Estimated by Analysys, as of 28 May 2021

Figure 48: One click to join broadcasters in game on Huya Live app



Source: Huya Live app

Clear roadmap of LT margin expansion, despite ST content investment

Narrowing loss from overseas business

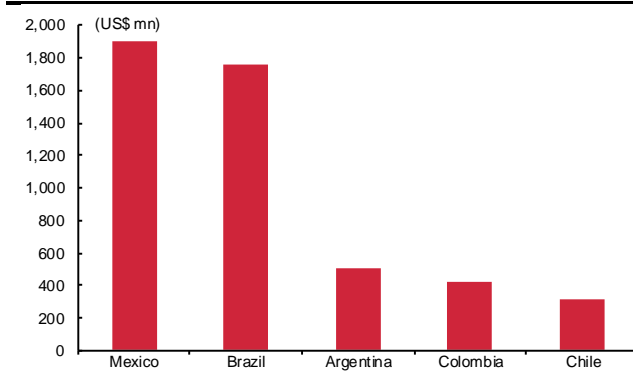
We expect to see margin improvement from Nimo TV this year, as mgmt. would focus on breakeven in certain countries or downsizing in countries that are incurring loss. With Tik Tok, Kwai, and Bigo's heightened competition overseas, we think Huya's strategy shift towards ecosystem this year is reasonable. Overseas biz delivered narrowing net loss in 1Q21, and we expect Huya to seek balance between growth and profitability.

Figure 49: Chinese game live streaming platforms' overseas expansion

	Product	Markets	Updates
Huya	Nimo TV	SEA, Latin America, Middle East	<ul style="list-style-type: none"> Entered Brazil in Jun 2019 Top-tier free content SDK for mobile game live streaming
Douyu	Nonolive, Mildom	SEA, Japan	<ul style="list-style-type: none"> Pan-entertainment content Optimize infrastructure
JOYY	Cube TV	SEA	<ul style="list-style-type: none"> Entered North America in Sep 2018

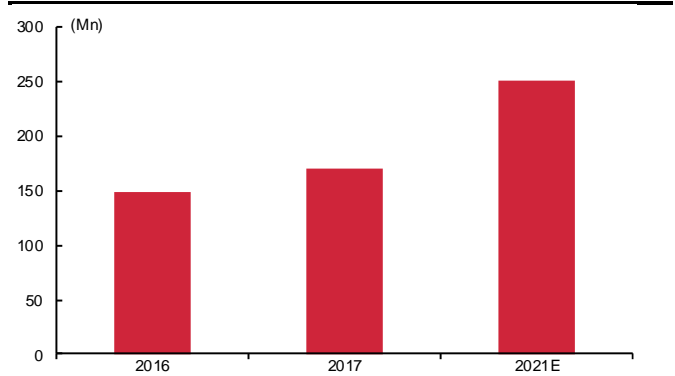
Source: iResearch, iiMedia

Figure 50: Latin America game market in 2020



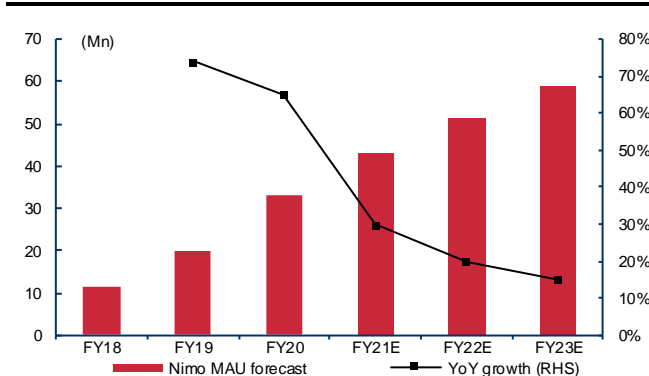
Source: Statista

Figure 51: SEA mobile gamer in 2017-201E



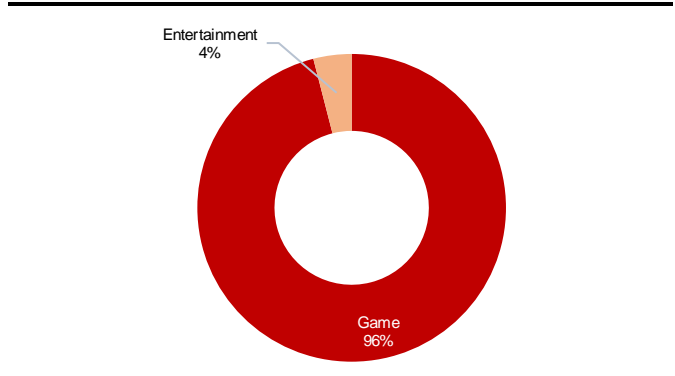
Source: Statista

Figure 52: Nimo TV MAU forecast



Source: Company data, CMBIS

Figure 53: Top 100 Nimo TV broadcasters by billings



Source: Nimo TV, in 24-30 May 2021

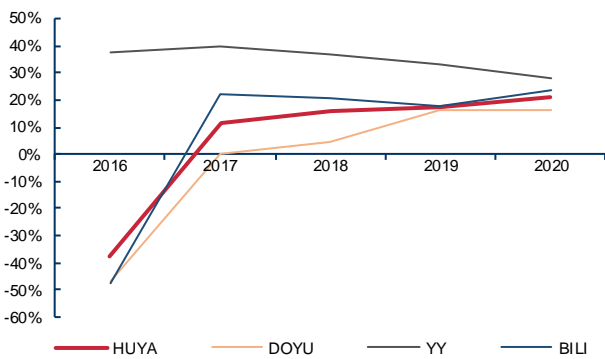
Expecting margin expansion with operating leverage

We expect Huya to see further operating leverage as it scales up, especially in bandwidth costs, revenue sharing and content costs, and S&M expenses. Compared with Douyu and YY, Huya has demonstrated superior capabilities in cost control, with its opex ratio trending below peers’.

We forecast Huya’s bandwidth costs/rev down to 6.9% in 2023E (vs. 8.1% in 2020), for scale effect and synergies with Tencent Cloud. We anticipate its content cost/rev ratio down to 65.3% in 2023E (vs. 70.1% in FY21E), with more high-quality PUGC and rational competition for broadcasters.

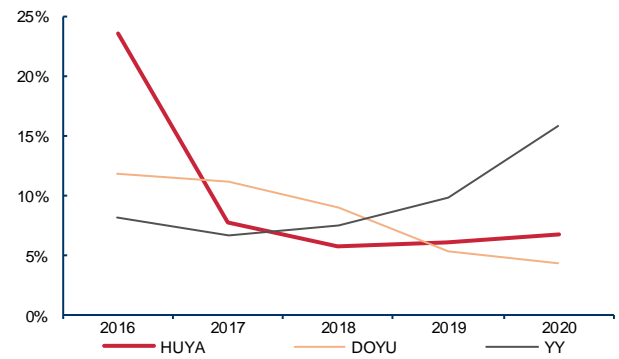
Finally, we estimate Huya’s S&M/Rev would reduce to 5.0% in 2023E, backed by operating leverage and better targeting. Coupled with improved cost structure and diversified monetization, we expect its GPM up to 21.9% in 2023E.

Figure 54: GPM comparison



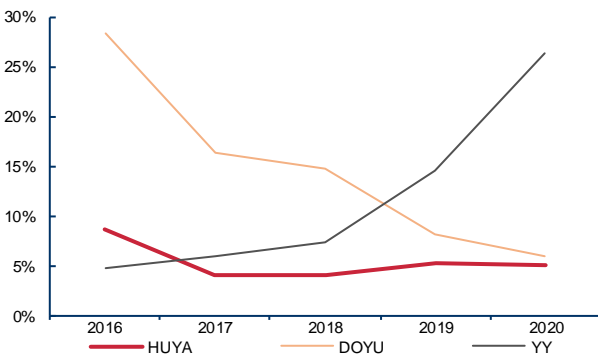
Source: Bloomberg

Figure 55: R&D to rev expense ratio comparison



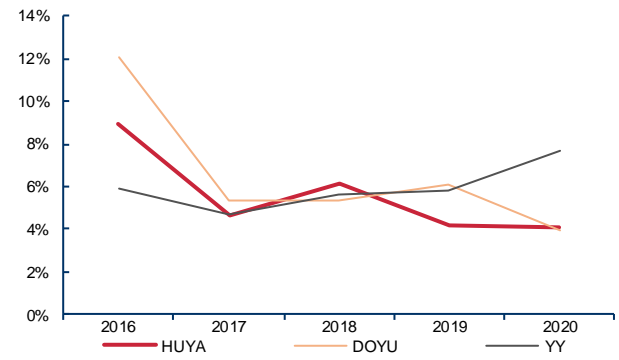
Source: Bloomberg

Figure 56: S&M to rev expense ratio comparison



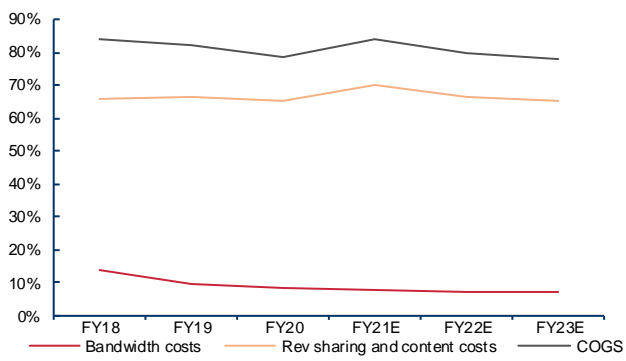
Source: Bloomberg

Figure 57: G&A to rev expense ratio comparison



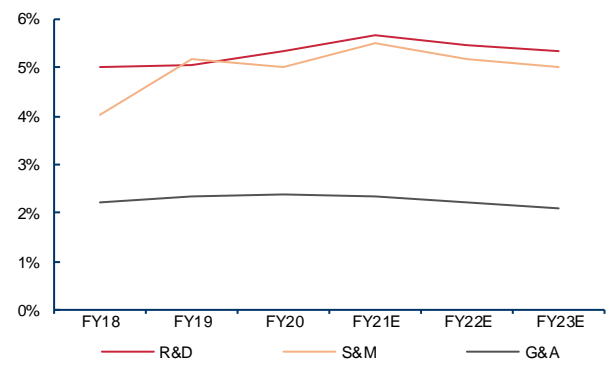
Source: Bloomberg

Figure 58: Huya bandwidth & rev sharing cost forecast



Source: Company data, CMBIS

Figure 59: Huya operating expense forecast



Source: Company data, CMBIS

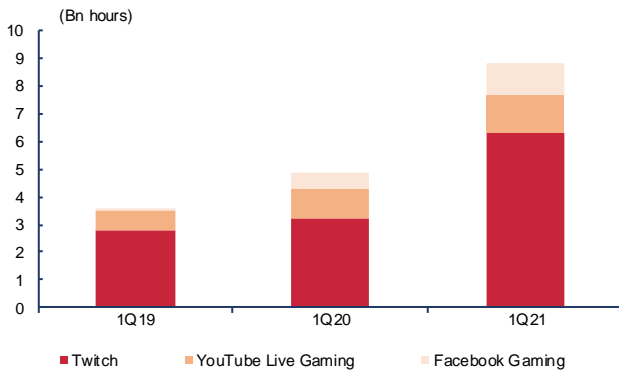
Long-term potential in ads and subscription

We believe Amazon’s Twitch is the most comparable peer due to its focus on game content. According to Stream Hatchet, Twitch has 67% share of worldwide game streams watched and 90% of content streamed in 2020. Based on Nielsen SuperData’s estimate, Twitch generated c. US\$2bn in 2020 from subscription, virtual gifting (“bits”), ads, and sponsorship.

Compared with Twitch and domestic peers, Huya has ample upside in ad revenue. According to Nielsen SuperData and The Information, we estimate that ads contributed c. 20% of Twitch’s revenue in 2020 (vs. Huya’s < 6% in 2020). As global ad industry recovers and Huya gains more traction in self-produced event sponsorship, we expect ads to contribute more in coming years.

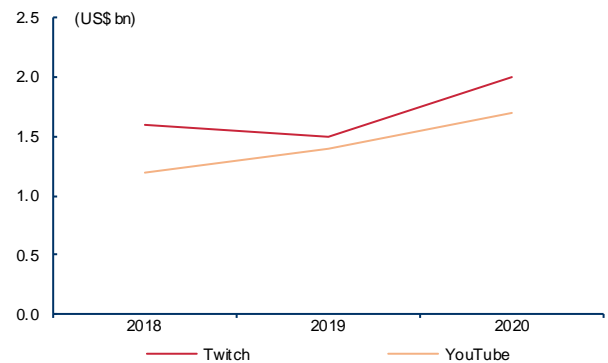
Another potential driver is subscription. Twitch offers subscription option to single streamers at US\$4.99/month (tier-1 subscription), with plans to lower price for less-developed regions. As Huya increases its ad load and cultivates popular hosts, we believe Huya’s subscription packages can increase attraction to less price-sensitive users. As such, we expect better margin from higher mix from ads & subs in the long run.

Figure 60: Streaming hours watched on top platforms



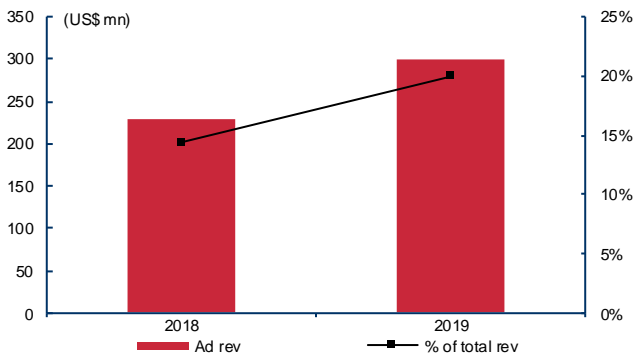
Source: Stream Hatchet

Figure 61: Twitch & YouTube gaming revenue



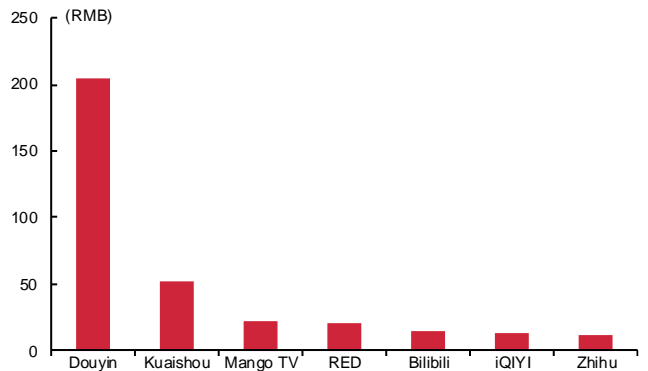
Source: Nielsen SuperData, Business of Apps

Figure 62: Twitch ads rev estimates



Source: The information, Business of Apps
Note: Total rev estimated by Nielsen SuperData

Figure 63: Ads/MAU comparison



Source: Company financial reports, QuestMobile

Financial Analysis

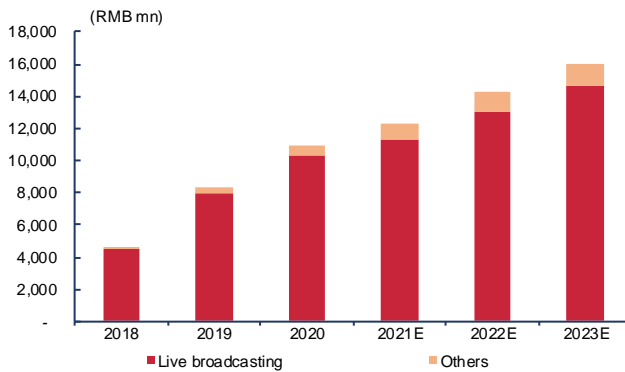
Revenue Breakdown

We forecast Huya revenue to grow at 12%/15%/13% in FY21/22/23E. By segment, we expect live streaming/ other revenue to deliver 19%/ 47% revenue CAGR in 2020-23E, with live streaming still as the largest contributor in the long run.

Key topline drivers come from:

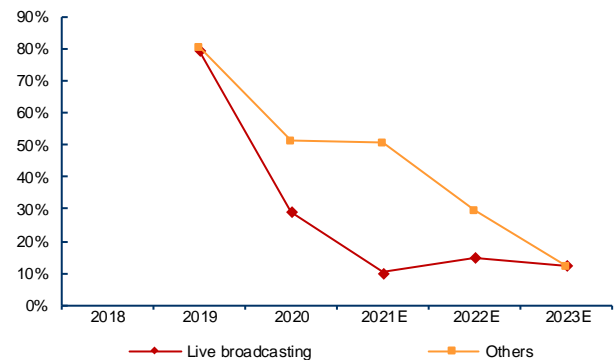
- 1) **Live streaming:** forecasting 19% rev CAGR in FY20-23E, mainly supported by mobile MAU growth at 17% CAGR. We expect paying ratio and ARPPU flat in the next three years, as live streaming stepped into mature stage with heightened competition from emerging platforms. We expect Huya to maintain its leadership with premium licensed and proprietary content, high user engagement, and enriched interaction scenarios.
- 2) **Others:** we expect Huya's other revenue to deliver 47% CAGR in FY20-23E and contribute 8% of total rev in FY22E, primarily driven by enhanced ads and sublicensing revenue. We view such assumption as conservative, as Huya's other rev contributed 8.2% in 1Q21 (vs. 5.5% in 2020) for the surging sublicensing revenue. Huya's new initiatives in cloud gaming and game companion may enhance user engagement with potential to unlock TAM in the long term.

Figure 64: Rev estimates



Source: Company data, CMBIS estimates

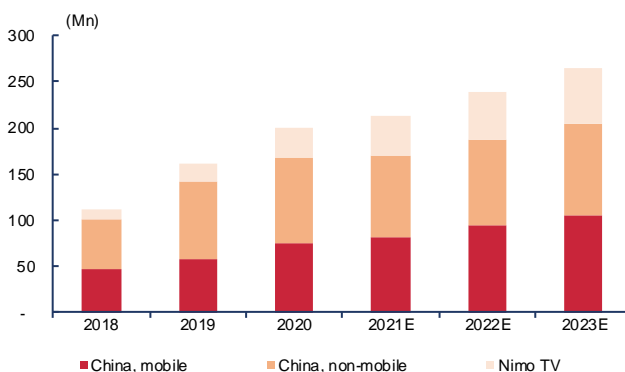
Figure 65: Rev growth breakdown



Source: Company data, CMBIS estimates

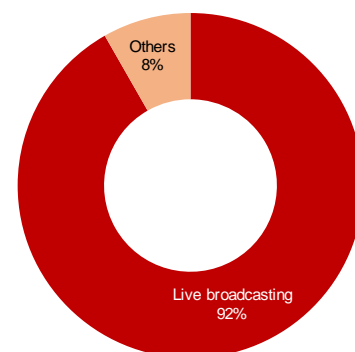
Note: Other rev growth is not included for clearer demonstration

Figure 66: MAU trend



Source: Company data, CMBIS estimates

Figure 67: FY22E revenue breakdown



Source: Company data, CMBIS estimates

Income Statement

We expect Huya's margin to dip in FY21E, then pick up in FY22-23E, due to mixed effect of ramping-up content investment and operating leverage.

We anticipate its GPM down to 16% in FY21E, for: 1) higher incentives for hosts and content creators; 2) investment in e-sports, such as the RMB2bn deal with Tengjing Sports in 2021; and 3) cloud gaming investment. In the long run, we expect Huya's improving PUGC production capabilities and mature agency system will bring cost leverage on content and revenue sharing, thus support GPM to pick up in FY22-23E.

We expect to see cost leverage in bandwidth and S&M, due to effective cost control and scale effect. As a result, we forecast its adj. net income to reach RMB769mn/ RMB1,398mn/ RMB1,898mn in FY21/22/23E, with adj. net margin at 12% in FY23E. Potential merger would bring further margin upside, if executed well.

Figure 68: Income statement

RMB mn, Dec-YE	FY18	FY19	FY20	FY21E	FY22E	FY23E
Net revenue	4,663	8,375	10,914	12,268	14,047	15,803
Cost of revenue	(3,934)	(6,893)	(8,646)	(10,340)	(11,265)	(12,361)
Gross profit	730	1,482	2,268	1,928	2,782	3,441
R&D exp	(265)	(509)	(734)	(817)	(918)	(1,013)
S&M exp	(189)	(438)	(558)	(683)	(740)	(800)
G&A exp	(288)	(353)	(445)	(437)	(487)	(524)
Other income	39	79	194	214	243	273
Operationg (loss)/profit	27	261	725	206	880	1,377
Other expenses	(2,129)	306	308	324	352	396
Profit before income tax	(2,102)	567	1,033	530	1,232	1,773
Income taxes (expense)/credit	51	(96)	(177)	(121)	(242)	(330)
Profit for the year	(2,051)	471	856	409	990	1,443
Adj. net profit	461	750	1,262	769	1,398	1,898
Margin Analysis						
Gross margin	16%	18%	21%	16%	20%	22%
Operating margin	1%	3%	7%	2%	6%	9%
Adj. net margin	10%	9%	12%	6%	10%	12%
Growth Analysis						
Revenue		80%	30%	12%	15%	13%
Gross profit		103%	53%	-15%	44%	24%
Operating profit		880%	177%	-72%	327%	56%
Adj. net profit		63%	68%	-39%	82%	36%

Source: Company data, CMBIS estimates

Balance Sheet

According to our estimates of profit before taxation and change in working capital, Huya has solid operating cash flow & financing cash flow in supporting CAPEX in the next three years. We expect Huya to hold RMB3,816mn/RMB4,709mn/RMB6,214mn cash and cash equivalent as of 31 Dec of 2021/22/23E.

Figure 69: Balance Sheet

RMB mn, Dec-YE	FY18	FY19	FY20	FY21E	FY22E	FY23E
Non-current assets	511	775	1,140	1,179	1,213	1,241
Investments	220	379	467	496	524	552
Property and equipment, net	87	97	95	87	77	62
Right of use assets, net	0	103	87	87	87	87
Others	204	196	491	509	525	540
Current assets	6,595	10,592	11,271	11,802	12,707	14,223
Short-term deposits	4,984	6,743	5,975	5,975	5,975	5,975
Short-term investment	300	2,220	1,207	1,207	1,207	1,207
Cash and cash equivalent	709	1,113	3,294	3,816	4,709	6,214
Other current asset	602	516	796	805	816	828
Current liabilities	1,380	2,447	2,385	2,022	1,562	1,208
Accounts payables	9	4	10	12	13	14
Deferred revenue	469	795	486	124	-311	-827
Accruals	853	1,460	1,707	1,704	1,678	1,839
Others	49	188	182	182	182	182
Non-current liabilities	81	235	249	249	249	249
Lease liabilities	0	70	58	58	58	58
Deferred revenue	81	165	178	178	178	178
Deferred tax liabilities	0	0	13	13	13	13
Shareholders' equity	5,645	8,685	9,777	10,546	11,944	13,842

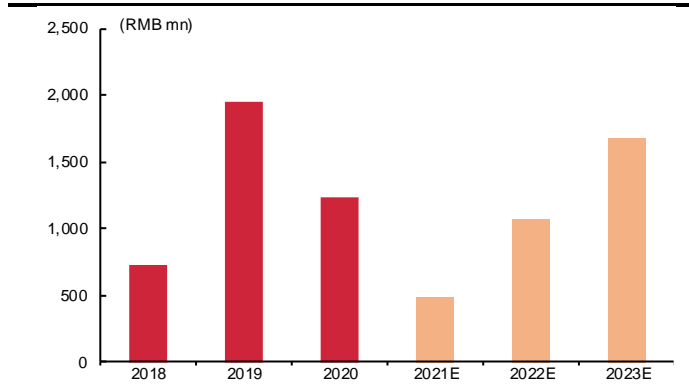
Source: Company data, CMBIS estimates

Cash Flow and Working Capital

Strong operating cash flow ahead

Based on strong user and revenue growth assumptions, we expect Huya to maintain its solid operating cash inflow trend and record RMB482mn/ RMB1,023mn/ RMB1,641mn of operating cash inflow in FY21/22/23E, respectively.

Figure 70: Operating cash flow projections



Source: Company data, CMBIS estimates

Figure 71: Cash flow and working capital analysis

RMB mn, Dec-YE	FY18	FY19	FY20	FY21E	FY22E	FY23E
Cash Flow						
Operating cash flow	717	1,945	1,240	482	1,023	1,641
CAPEX	(127)	(85)	(138)	(142)	(145)	(148)
Others	(4,440)	(3,600)	1,143	18	15	12
Investing cash flow	(4,567)	(3,685)	1,005	(124)	(130)	(137)
Issuance of preference shares	2,919	0	0	0	0	0
Issuance of common shares	1,208	2,111	0	0	0	0
Others	0	23	265	0	0	0
Financing cash flow	4,127	2,134	265	0	0	0
Cash at period end	277	394	2,510	358	893	1,505

Source: Company data, CMBIS estimates

Valuation

Investment Thesis

We initiate with BUY at DCF-based TP of US\$23.8, implying 27x FY22E P/E. We believe Huya can maintain its leadership in game streaming with premium content, well-established agency system, and enriched interaction scenarios. Huya's positive price drivers and catalysts would originate from: 1) new blockbuster game launch, 2) strong e-sports tournament final hype, 3) further visibility for potential merger; and 4) new business initiatives to unlock TAM.

Initiate with BUY

We use DCF valuation as our primary method, as it is appropriate to apply the DCF method to internet companies with stable free cash flows. Assuming a WACC of 11.5% and a terminal growth rate of 3%, our estimate TP is US\$23.8, representing 49x/27x FY21/22E P/E.

Figure 72: DCF valuation

DCF valuation (RMB mn)										
	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
EBIT	206	880	1,377	1,623	1,815	2,671	3,805	5,260	7,069	9,258
Tax	(121)	(242)	(330)	(412)	(461)	(640)	(912)	(1,260)	(1,694)	(2,219)
D&A	113	124	137	151	166	182	200	220	242	267
Working capital	(372)	(472)	(365)	(510)	(575)	(517)	(465)	(419)	(377)	(339)
CAPEX	(124)	(130)	(137)	(143)	(151)	(154)	(157)	(160)	(163)	(166)
FCF	(297)	161	682	707	794	1,542	2,472	3,641	5,078	6,800
FCF Growth		-154%	323%	4%	12%	94%	60%	47%	39%	34%
Terminal Value										82,551
PV (FCF+ Terminal Value)	(297)	145	549	510	514	895	1,287	1,701	2,128	33,586

Assumptions	
WACC	11.5%
Tax rate	20.0%
Risk free rate	3.6%
Cost of debt	0.0%
Beta	1.10
Market risk return	11.4%
Cost of equity	12.2%
Debt/Assets	5.7%
WACC	11.5%
Terminal growth rate	3.0%
Debt value	0

Equity Value	
PV	41,017
minus: Net cash	4,874
minus: Minority Interest	0
Equity Value	36,144
Shares (mn)	236
Target Price (US\$) based on DCF	23.8

		WACC				
		9.5%	10.5%	11.5%	12.5%	13.5%
Growth	1.5%	29.4	24.4	20.5	17.3	14.8
	2.0%	31.2	25.7	21.5	18.1	15.3
	2.5%	33.3	27.2	22.6	18.9	16.0
	3.0%	35.7	28.9	23.8	19.8	16.7
	3.5%	38.5	30.8	25.2	20.9	17.5
	4.0%	41.8	33.1	26.7	22.0	18.3
	4.5%	45.8	35.7	28.5	23.3	19.3

Source: Company data, Bloomberg, CMBIS estimates

Note: FX = 6.43

Peers comparison

As a crosscheck, we select three game production companies, seven live streaming & VAS companies, two advertising companies, and four global entertainment companies for comparison. Compared with the industry multiple of 32x FY22E P/E, we think our DCF-based valuation at 27x FY22E P/E is not demanding. We believe Huya deserves premium multiple over traditional entertainment livestreaming peers and Douyu, with its higher growth potential, user engagement and premium content pipeline.

Figure 73: Peers valuation

Company	Ticker	Mkt cap (USD mn)	Currency	Price	CMBI Rating	CMBI TP	PE			PS			EV/EBITDA			FY0-2 EPS CAGR
							FY0	FY1	FY2	FY0	FY1	FY2	FY0	FY1	FY2	
Huya	HUYA US	3,950	USD	17	BUY	24	34.2	19.2	14.5	2.1	1.9	1.7	26.6	10.8	7.7	59%
Game																
Tencent	700 HK	741,107	HKD	600	BUY	735	33.3	26.9	21.9	8.0	6.7	5.7	23.0	19.4	16.5	23%
NetEase	NTES US	76,599	USD	114	NA	NA	27.2	22.9	19.6	5.5	4.7	4.1	21.5	18.1	14.7	18%
XD Inc.	2400 HK	3,472	HKD	56	NA	NA	467.6	65.7	41.9	7.1	5.5	4.5	78.0	31.8	18.7	234%
Average							30.2	24.9	20.8	6.8	5.7	4.9	22.2	18.7	15.6	21%
Livestreaming & VAS																
Momo	MOMO US	3,247	USD	16	HOLD	15	9.8	7.9	7.0	1.4	1.2	1.1	5.9	4.8	4.2	19%
YY	YY US	5,887	USD	74	BUY	136	NA	88.9	30.3	1.9	1.5	1.2	230.6	10.5	6.1	NA
Bilibili	BILI US	44,375	USD	115	BUY	57	NA	NA	NA	14.6	10.2	7.6	NA	NA	303.5	NA
Douyu	DOYU US	2,670	USD	8	NA	NA	NA	21.5	23.4	1.7	1.5	1.3	NA	26.8	18.7	NA
TME	TME US	27,115	USD	16	NA	NA	39.0	28.9	22.1	5.0	4.2	3.5	36.0	25.2	18.7	33%
Mango	300413 CH	20,021	CNY	72	NA	NA	50.8	41.3	34.7	7.0	5.7	4.9	18.3	14.5	12.2	21%
iQiyi	IQ US	12,281	USD	16	BUY	30	NA	NA	738.2	2.4	2.2	1.9	NA	769.1	25.9	NA
Average							33.2	37.7	23.5	4.9	3.8	3.1	20.1	16.4	12.0	24%
Advertising																
Baidu	BIDU US	67,125	USD	190	BUY	338	19.6	16.6	13.4	3.3	2.9	2.6	11.9	10.4	8.4	21%
Weibo	WB US	11,226	USD	49	NA	NA	18.8	16.0	13.9	5.3	4.7	4.3	15.8	13.1	11.2	16%
Average							19.2	16.3	13.7	4.3	3.8	3.4	13.9	11.8	9.8	19%
Global entertainment																
Facebook	FB US	954,899	USD	337	NA	NA	23.6	20.4	17.9	8.2	6.9	5.9	14.6	12.4	10.4	15%
Netflix	NFLX US	221,653	USD	500	NA	NA	46.3	39.0	30.1	7.5	6.5	5.7	33.8	27.4	21.7	24%
Snapchat	SNAP US	96,848	USD	64	NA	NA	341.8	114.1	50.4	24.8	16.8	11.6	240.4	80.9	38.9	160%
Twitter	TWTR US	48,550	USD	61	NA	NA	78.0	55.7	39.4	10.1	8.2	6.8	33.2	25.1	19.9	41%
Average							49.3	38.4	29.1	8.6	7.2	6.1	27.2	21.6	17.3	27%
Total Average							34.7	32.2	22.8	5.9	4.8	4.0	21.4	75.1	35.1	23%

Source: Bloomberg

Note: Data updated by 15 Jun 2021; XD Inc., YY, iQIYI, and Snapchat were excluded as outliers for average calculation

Key Investment Risks

Risks regarding the uncertainty in the Douyu-Huya merger

The market eyes on the potential merger of Douyu, Penguin, and Huya. There may be upward risks due to operating synergies if the merge is to go through, and there may be downward risks because of the regulatory overhang for anti-trust concerns.

Other online entertainment platforms diverting user time and wallet share

As China's internet industry is near saturation, there are risks that emerging entertainment platforms may gain share in terms of the time and money that users spend online. If Huya does not effectively acquire and retain users, or if it fails to monetize its online traffic, its operating and financial results may be adversely affected.

Higher-than-expected content and revenue-sharing costs

Due to the intensifying competition in China's online entertainment industry, Huya may choose to invest more in e-sports tournaments, self-produced events, as well as broadcaster sign-up bonus and revenue sharing expenses. If Huya cannot cost-effectively maintain a quality content pipeline and a diverse broadcaster base, its operating and financial results may be adversely affected.

Risks of more stringent regulations on live streaming

China has established more stringent regulations on live streaming, involving limits on live streaming content and gifting from minors. If the regulatory landscape of the live streaming industry continues to strengthen, the paying ratio and ARPPU for Huya's live streaming business may be adversely affected.

Financial Summary

Income statement

YE 31 Dec (RMB mn)	FY19A	FY20A	FY21E	FY22E	FY23E
Revenues	8,375	10,914	12,268	14,047	15,803
Live broadcasting	7,976	10,312	11,359	12,887	14,498
Others	398	603	909	1,160	1,305
COGS	(6,893)	(8,646)	(10,340)	(11,265)	(12,361)
Gross profit	1,482	2,268	1,928	2,782	3,441
R&D	(509)	(734)	(817)	(918)	(1,013)
S&M	(438)	(558)	(683)	(740)	(800)
G&A	(353)	(445)	(437)	(487)	(524)
Other income	79	194	214	243	273
Operating profit	261	725	206	880	1,377
Fair value change	-	(8)	-	-	-
Interest income	304	313	324	352	396
Other income	1	2	-	-	-
Pre-tax Income	567	1,033	530	1,232	1,773
Income Tax	(96)	(177)	(121)	(242)	(330)
Net profit	468	884	438	1,019	1,471
Adj. net profit	750	1,262	769	1,398	1,898

Cash flow summary

YE 31 Dec (RMB mn)	FY19A	FY20A	FY21E	FY22E	FY23E
Net income	468	884	438	1,019	1,471
D&A	63	103	113	124	137
Change in WC	1,154	(162)	(372)	(472)	(365)
Others	260	415	303	351	398
Operating CF	1,945	1,240	482	1,023	1,641
Capex	(71)	(428)	(124)	(130)	(137)
Others	(3,614)	1,433	-	-	-
Investing CF	(3,685)	1,005	(124)	(130)	(137)
Preference shares	-	-	-	-	-
Common shares	2,111	-	-	-	-
Others	23	265	-	-	-
Financing CF	2,134	265	-	-	-
Net change in cash	394	2,510	358	893	1,505
Cash (beg of yr)	709	1,115	3,458	3,816	4,709
Fx effect	11	(166)	-	-	-
Cash (end of yr)	1,115	3,458	3,816	4,709	6,214

Balance sheet

YE 31 Dec (RMB mn)	FY19A	FY20A	FY21E	FY22E	FY23E
Non-current assets	775	1,140	1,179	1,213	1,241
PP&E	97	95	87	77	62
Right-of-use assets	103	87	87	87	87
Intangible assets	45	63	81	97	112
Others	530	895	923	952	980
Current assets	10,592	11,271	11,802	12,707	14,223
Cash & restricted cash	1,115	3,458	3,981	4,874	6,378
Receivables	62	71	80	92	103
Short-term deposits	6,743	5,975	5,975	5,975	5,975
Other current asset	2,672	1,766	1,766	1,766	1,766
Current liabilities	2,447	2,385	2,022	1,562	1,208
Accounts payables	4	10	12	13	14
Deferred revenue	795	486	124	(311)	(827)
Accruals	1,460	1,707	1,704	1,678	1,839
Others	188	182	182	182	182
Non-current liabilities	235	249	249	249	249
Lease liabilities	70	58	58	58	58
Deferred revenue	165	178	178	178	178
Deferred tax liabilities	-	13	13	13	13
Shareholders' equity	8,685	9,777	10,546	11,944	13,842

Key ratios

YE 31 Dec	FY19A	FY20A	FY21E	FY22E	FY23E
Sales mix (%)					
Live broadcasting	95.2	94.5	92.6	91.7	91.7
Others	4.8	5.5	7.4	8.3	8.3
Total	100.0	100.0	100.0	100.0	100.0
Growth rate (%)					
Revenue	79.6	30.3	12.4	14.5	12.5
Gross profit	103.1	53.0	(15.0)	44.3	23.7
EBIT	880.3	177.4	(71.6)	327.2	56.4
Adj. net profit	62.7	68.2	(39.0)	81.8	35.7
P&L ratios (%)					
Operating margin	3.1	6.6	1.7	6.3	8.7
Pre-tax margin	6.8	9.5	4.3	8.8	11.2
Adj. net margin	9.0	11.6	6.3	10.0	12.0
Effective tax rate	(16.9)	(17.1)	(22.8)	(19.6)	(18.6)
Returns (%)					
ROE	8.6	12.9	7.3	11.7	13.7
ROA	6.6	10.2	5.9	10.0	12.3
Per share					
EPS (RMB)	3.2	5.3	3.1	5.6	7.4
DPS (RMB)	0.0	0.0	0.0	0.0	0.0
BVPS (RMB)	37.4	41.0	43.2	47.8	54.0

Source: Company data, CMBIS estimates

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