

Zhihu Inc. (ZH US)

A go-to Q&A-inspired content community

Zhihu is well-positioned to surf on the China's content paying tailwinds, thanks to its unique value proposition, quality informative content, and diverse monetization. With video-lization, viewers conversion and lower-tier cities penetration, we expect Zhihu's MAUs up to 167mn in 2023E, at 35% CAGR in FY20-23E. Backed by rising contribution from content commerce solution (CCS), we forecast its rev to deliver 91% CAGR in 2020-23E with breakeven in 2023E. Initiate with BUY and DCF-based TP of US\$16.

- Q&A-inspired content community with trustworthy PUGC.** According to CIC, Zhihu was China's Top 1 Q&A community (in MAUs and rev) and the most trusted platform in 2020. Thanks to its differentiated and informative content, Zhihu attracted quality user base of 85mn MAUs in 1Q21, with 75% from higher-tier cities and 80% below 30. We expect Zhihu to see 35% MAU CAGR in 2020-23E (targeting 300mn in FY25E), through lower-tier city penetration, content expansion, and search engine traffic conversion (469mn monthly viewers in 4Q20, with Baidu and Tencent as strategic investors).
- Unlocking TAM with video-lization and content enrichment.** To attract and engage users, Zhihu facilitates content diversification and prioritizes middle-form (1-15 mins) explanatory videos. Backed by its massive PUGC library, we expect Zhihu's deeper video penetration (30% of DAUs in Apr 2021) to unlock its MAU ceiling and time spent. Given its lower-than-peers ads/MAU, we expect Zhihu's ad rev to grow at 50% CAGR in FY20-23E, driven by rising MAU, eCPM but stable ad load. With content enrichment, we anticipate membership rev to deliver 75% CAGR, backed by user growth and rising paying ratio (+4 ppts from FY20 to FY23E).
- CCS as long-term driver with high CTR.** By matching users with specific demand and quality promotion content, CCS delivers superior CTR (much higher than traditional ad's <1%), short decision cycle, and high ROI. We forecast Zhihu's CCS rev would grow at 206% CAGR in FY20-23E, with 42% rev mix in FY23E. Coupled with rev from other innovative biz (e.g., e-commerce and education), we estimate Zhihu's total rev to see 91% CAGR in FY20-23E, with anticipated breakeven in FY23E.
- Initiate with BUY.** We set our DCF-based TP at US\$16 (implying 20.0x/ 10.6x FY21/22E P/S). Further catalysts: 1) strong user metrics in Gaokao period; 2) video penetration; and 3) better-than-expected monetization.

Earnings Summary

(YE 31 Dec)	FY19A	FY20A	FY21E	FY22E	FY23E
Revenue (RMB mn)	670.5	1,352.2	2,926.1	5,498.5	9,363.3
YoY growth (%)	NA	101.7	116.4	87.9	70.3
Adj. net income (RMB mn)	(824.5)	(337.5)	(470.0)	(425.7)	251.7
EPS (RMB)	(2.02)	(0.71)	(0.82)	(0.75)	0.44
YoY growth (%)	NA	NA	NA	NA	NA
Consensus EPS (RMB)	NA	NA	(0.9)	(0.8)	1.0
P/E (x)	NA	NA	NA	NA	190.3
P/S (x)	51.3	29.7	16.4	8.7	5.1
Yield (%)	0.0	0.0	0.0	0.0	0.0
ROE (%)	(25.6)	(12.3)	(6.2)	(6.0)	3.4
Net gearing (%)	Net cash	Net cash	Net cash	Net cash	Net cash

Source: Company data, CMBIS estimates, Bloomberg. EPS, ROE refers to adj. net income.

BUY (Initiation)

Target Price	US\$16.0
Up/Downside	+22.3%
Current Price	US\$13.1

China Internet Sector

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Stock Data

Mkt Cap (US\$ mn)	7,344
Avg 3 mths t/o (US\$ mn)	21.03
52w High/Low (US\$)	13.49/ 6.81
Total Issued Shares (mn)	523

Source: Bloomberg

Shareholding Structure

BlackRock	1.15
Krane Funds Advisors	0.86
Aspex Management	0.75

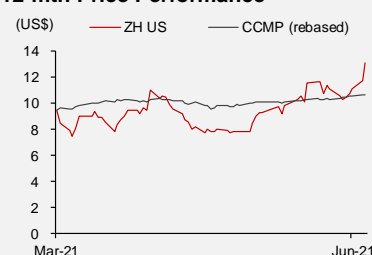
Source: Bloomberg

Share Performance

	Absolute	Relative
1-mth	40.5%	33.0%
3-mth	65.2%	48.5%
6-mth	NA	NA

Source: Bloomberg

12-mth Price Performance



Source: Bloomberg

Auditor: PwC

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<https://euromoney.com/brokers>

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Investment Thesis

Q&A-inspired content community with trustworthy PUGC.

According to CIC, Zhihu was China's Top 1 Q&A community (in MAUs and rev) and the most trusted platform in 2020. Thanks to its differentiated and informative content, Zhihu attracted quality user base of 85mn MAUs in 1Q21, with 75% from higher-tier cities and 80% below 30. We expect Zhihu to see 35% MAU CAGR in 2020-23E (targeting 300mn in FY25E), through lower-tier city penetration, content expansion, and search engine traffic conversion (469mn monthly viewers in 4Q20, with Baidu and Tencent as strategic investors).

Unlocking TAM with video-lization and content enrichment.

To attract and engage users, Zhihu facilitates content diversification and prioritizes middle-form (1-15 mins) explanatory videos. Backed by its massive PUGC library, we expect Zhihu's deeper video penetration (30% of DAUs in Apr 2021) to unlock its MAU ceiling and time spent. Given its lower-than-peers ads/MAU, we expect Zhihu's ad rev to grow at 50% CAGR in FY20-23E, driven by rising MAU, eCPM but stable ad load. With content enrichment, we anticipate membership rev to deliver 75% CAGR, backed by user growth and rising paying ratio (+4 pts from FY20 to FY23E).

CCS as long-term driver with high CTR.

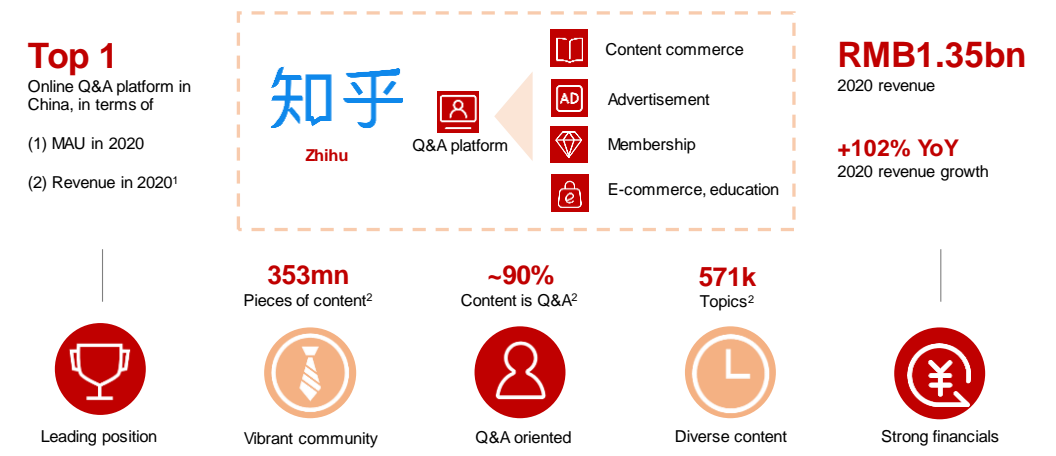
By matching users with specific demand and quality promotion content, CCS delivers superior CTR (much higher than traditional ad's <1%), short decision cycle, and high ROI. We forecast Zhihu's CCS rev would grow at 206% CAGR in FY20-23E, with 42% rev mix in FY23E. Coupled with rev from other innovative biz (e.g., e-commerce and education), we estimate Zhihu's total rev to see 91% CAGR in FY20-23E, with anticipated breakeven in FY23E.

Initiate with BUY.

We set our DCF-based TP at US\$16 (implying 20.0x/ 10.6x FY21/22E P/S). Further catalysts: 1) strong user metrics in Gaokao period; 2) video penetration; and 3) better-than-expected monetization.

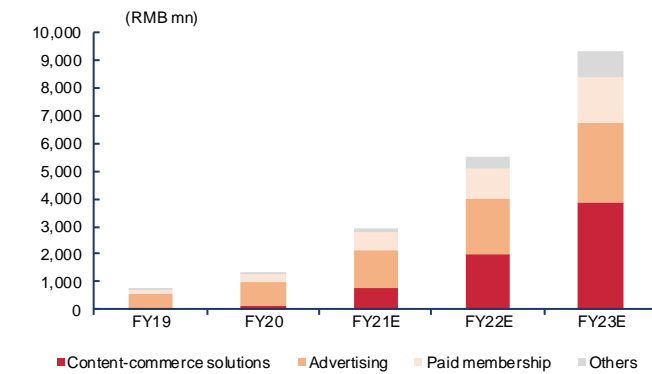
Focus Charts

Figure 1: Overview of Zhihu



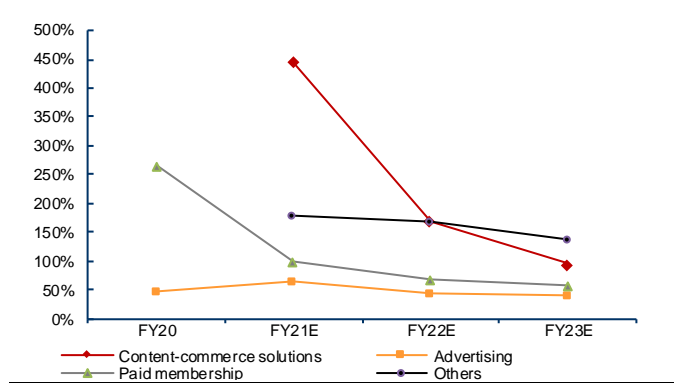
Source: Company data, Frost & Sullivan. Note refer to Figure 6

Figure 2: Rev estimates



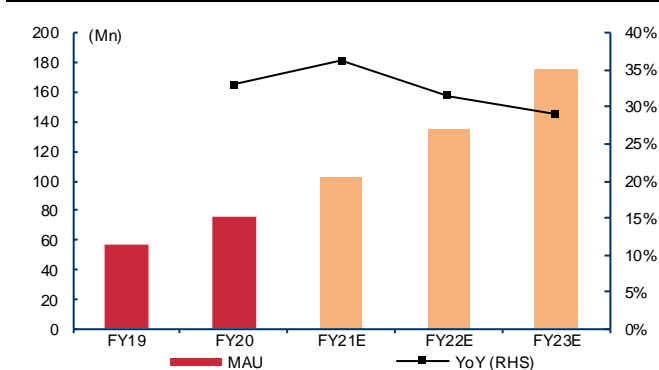
Source: Company data, CMBIS estimates

Figure 3: Rev growth breakdown



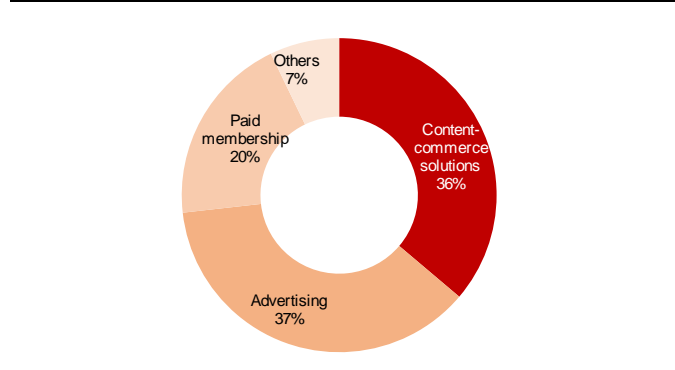
Source: Company data, CMBIS estimates

Figure 4: MAUs estimates



Source: Company data, CMBIS estimates

Figure 5: FY22E revenue breakdown



Source: Company data, CMBIS estimates

Company Overview

Largest Q&A-inspired content community with fastest growth

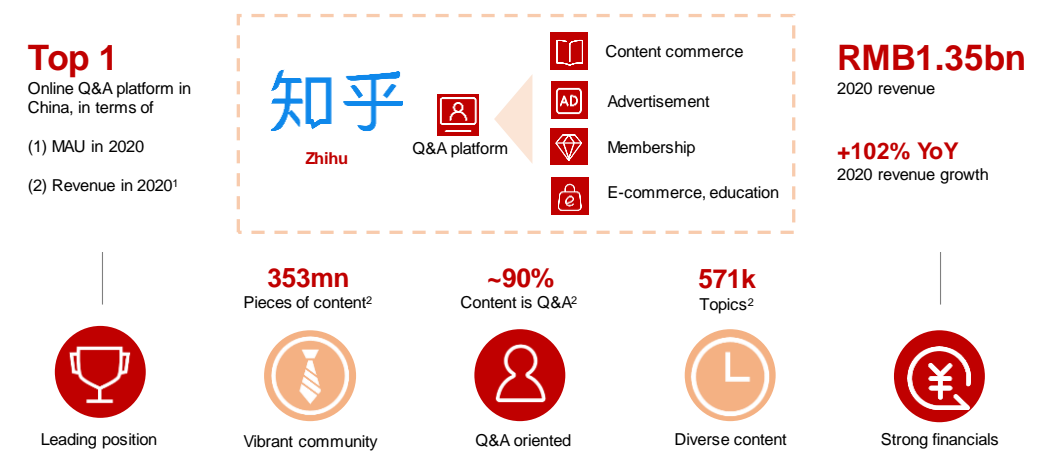
China's largest online Q&A platform

Founded in 2011, Zhihu is China's Top 1 online Q&A platform in terms of 2020 MAUs and revenue, according to CIC. Starting as an invitation-based knowledge community, Zhihu started public registration in 2013 to scale up users, and has maintained strong reputation for trusted PUGC, as CIC rated Zhihu as the most trusted platform in China in 2020.

Zhihu has fast-growing and high-quality user base. As of 31 Dec 2020, Zhihu's 75.7mn MAUs (85mn in 1Q21, +37.7% YoY) generated 675.7mn interactions per month. Its 43.1mn cumulative content creators contributed 353.2mn pieces of content (2018-20 CAGR at 64%), including 315.3mn Q&As (c. 90% of all content).

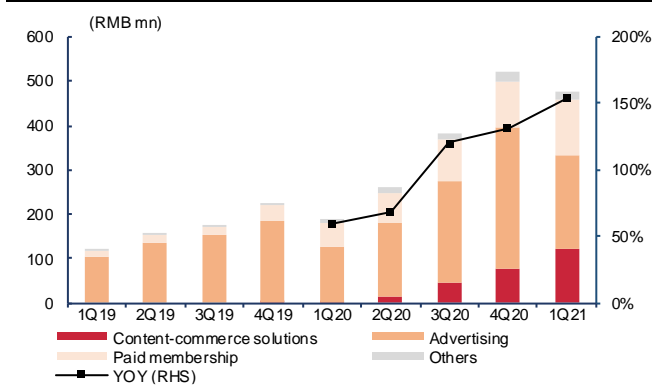
Stepping up commercialization in 2016, Zhihu generates diverse revenue with considerable upside. Its revenue surged 103% YoY to RMB1.35bn in 2020, mainly contributed by ads (62%), membership (24%), and content commerce solution (CCS, 10%). We expect CCS to be primary revenue driver in the long run, based on Zhihu's credibility and quality users.

Figure 6: Overview of Zhihu



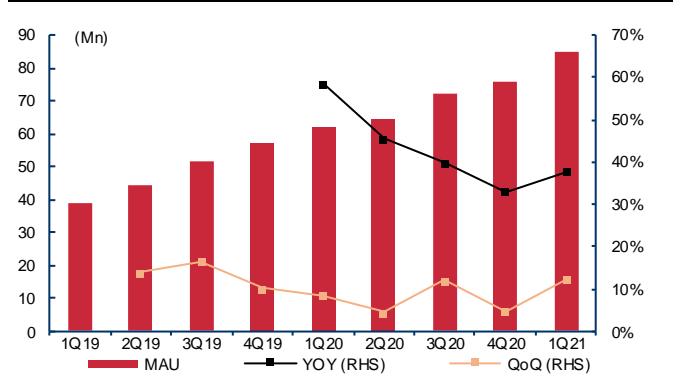
Source: Company data, CIC
Note: 1) According to CIC; 2) as of 2020

Figure 7: Zhihu's quarterly revenue trend



Source: Company data

Figure 8: Zhihu's quarterly MAU trend



Source: Company data

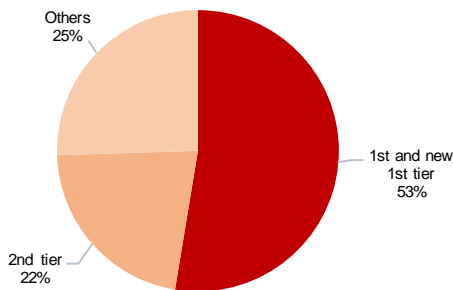
With trustworthy PUGC content and sizable high-quality users

Zhihu's vibrant community consists of young, knowledgeable users with relatively high consumption power. In its invitation-only era, Zhihu's seed users included Li Kaifu (tech veteran and Sinovation Ventures's founder) and Tony Ma (Tencent's founder). In 2020, c. 75% of Zhihu users came from high-tier cities, and 79% were below 30.

Zhihu's knowledge-focused positioning attracts active content creators. In 4Q20, Zhihu had 3.3mn average monthly active content creators, accounting for 4% MAUs (vs. Bilibili's 1%). Among the monthly Top 100 contributors by upvotes in Apr 2020-Apr 2021, 96% only showed up once, suggesting low concentration on top content creators and its strong self-incubated capability.

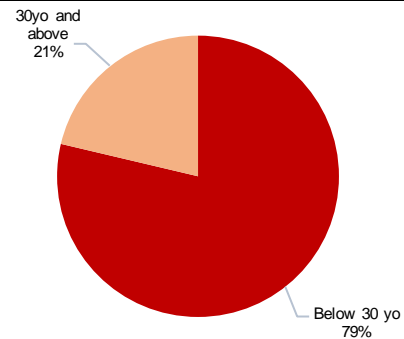
With quality users and creditable upvote system, Zhihu becomes the go-to community for trusted Q&A content. According to CIC, Zhihu was the first choice among all Chinese platforms to look for information or find answers in 2020.

Figure 9: 75% Zhihu users from higher-tier cities



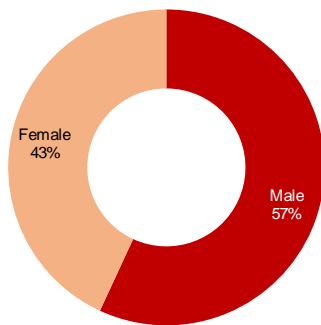
Source: Company data, as of Dec 2020

Figure 10: 79% Zhihu users below 30 years old



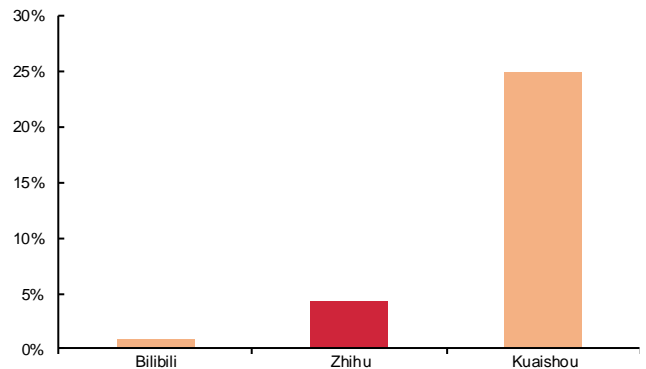
Source: Company data, as of Dec 2020

Figure 11: 57% Zhihu users are male



Source: Company data, as of Dec 2020

Figure 12: 4% of Zhihu's 4Q20 MAUs are content creators (vs. Bilibili's 1%)



Source: Company data, as of Dec 2020

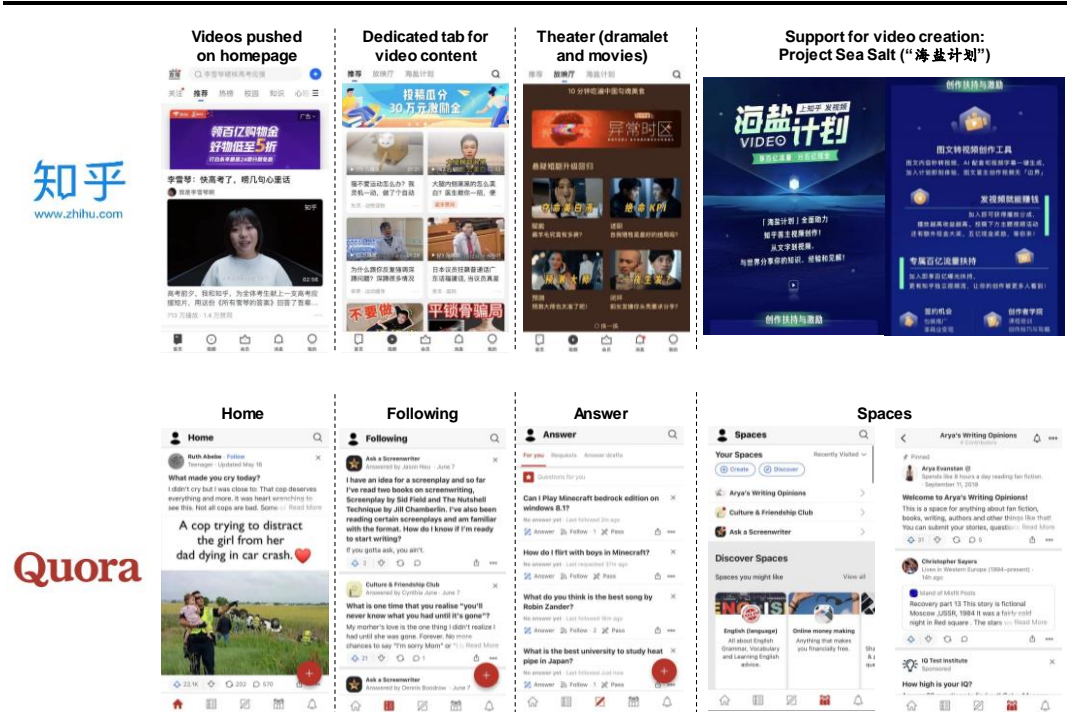
Beyond Q&A: transforming towards multi-format community with video-lization

Zhihu has been expanding content formats to attract users and boost engagement, with focus on video-lization. Content creators can contribute with Q&As (text and image, video), live streaming, and columns. Users can discover content with feeds, searches, and trending topics (热榜).

To capture video tailwinds, Zhihu encourages the production of explanatory, middle-form videos. Zhihu offers production tools, supporting team, and incentive program to facilitate video penetration. Its Sea Salt Project (海盐计划) launched in Oct 2020 offered RMB500mn awards for video-based answers.

Zhihu's content diversification also supports its membership program, Yan Selection (盐选会员). As of Dec 2020, Yan Selection included 3.4mn pieces of premium content, such as columns, e-books, lectures, and audiobooks.

Figure 13: Zhihu’s video initiative vs. Quora’s text-and-image content



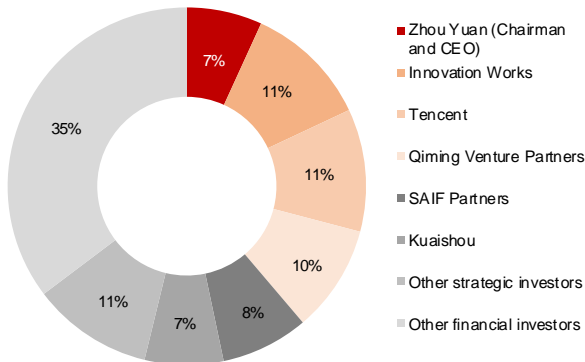
Source: Zhihu app, Quora app

Backed by strong relationship with internet giants

We expect Zhihu to leverage strong relationships with its powerful shareholders. As of Apr 2021, its solid shareholders included Tencent (11.1%), Kuaishou (7.1%), as well as Baidu, Alibaba, JD, and other strategic investors (10.9%).

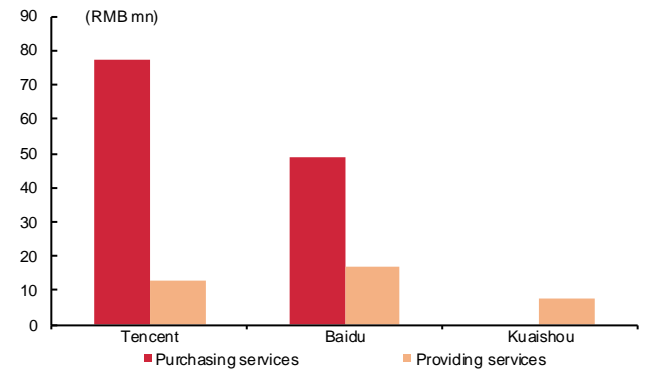
Zhihu demonstrates operating synergies with its shareholders in ads, e-commerce, and cloud service. We expect Zhihu's close collaboration with shareholders to convert search engine and social network traffic to registered users. The onboard of Alibaba and JD suggests Zhihu's capability of diverting quality traffic to e-commerce platforms.

Figure 14: Zhihu’s post-IPO shareholding structure



Source: Company data

Figure 15: Transactions with related parties in 2020



Source: Company data

Investment Summary

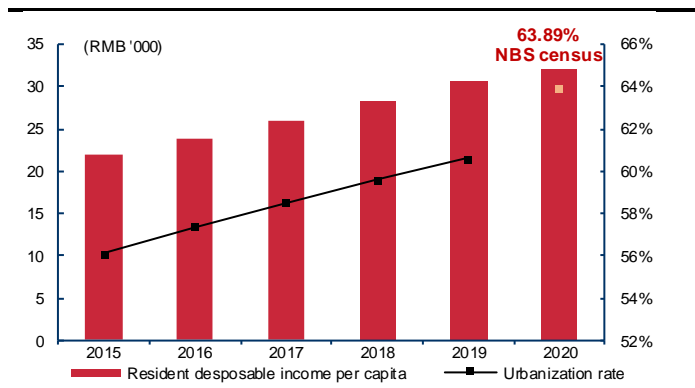
User expansion with differentiated position and content paying tailwinds

Well positioned to capture content-paying boom

Zhihu is benefiting from China's growing educated population and increasing urbanization rate. According to NBS, China's urbanization rate reached 63.9% in 2020, and 15.5% of the population had college education. We forecast Chinese population with high school degree or above to reach 470mn in 2025E, suggesting Zhihu's user upside.

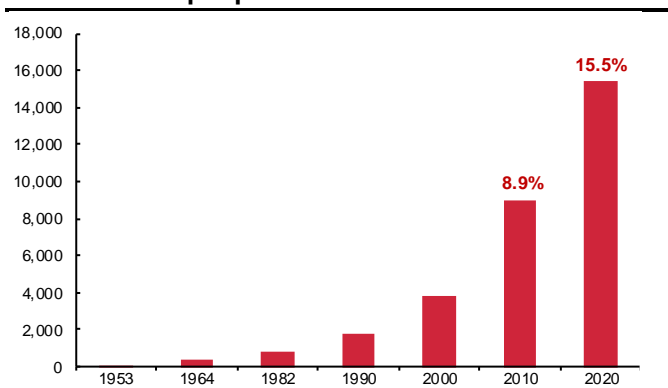
We expect Zhihu to surf content-paying tailwinds as a comprehensive community with trustworthy PUGC. According to CIC, China's online community platforms will outpace PGC platforms with 30.3% CAGR in 2020-23E. Comprehensive platforms would achieve 40.8% CAGR, outrunning vertical platforms' 17.4%.

Figure 16: China's per capital disposable income and urbanization rate



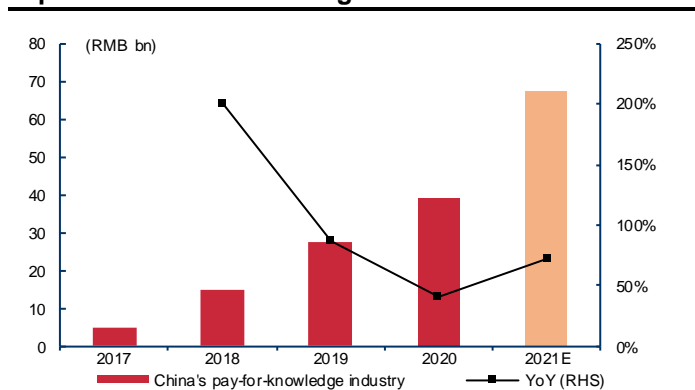
Source: Wind, NBS
Note: 2015-19 and 2020 urbanization rate from different NBS measures

Figure 17: Number of college degree holders per 100k Chinese people in census



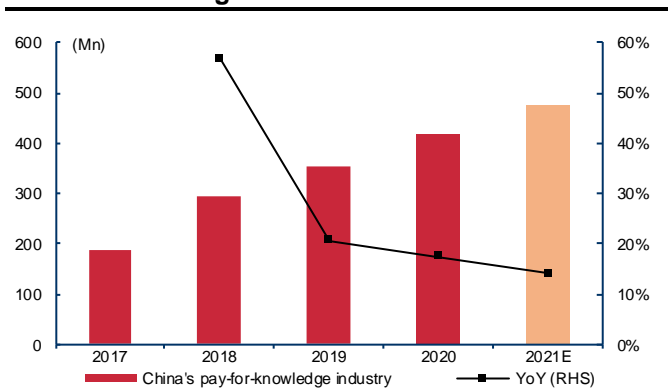
Source: NBS

Figure 18: China's pay-for-knowledge industry size expected to see 72% YoY growth in 2021E



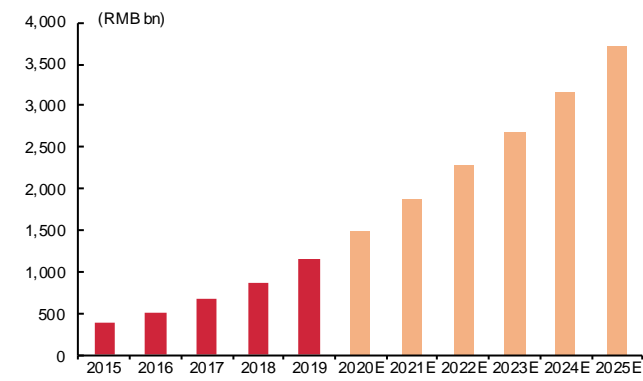
Source: iiMedia

Figure 19: China's pay-for-knowledge user expected to see 14% YoY growth in 2021E



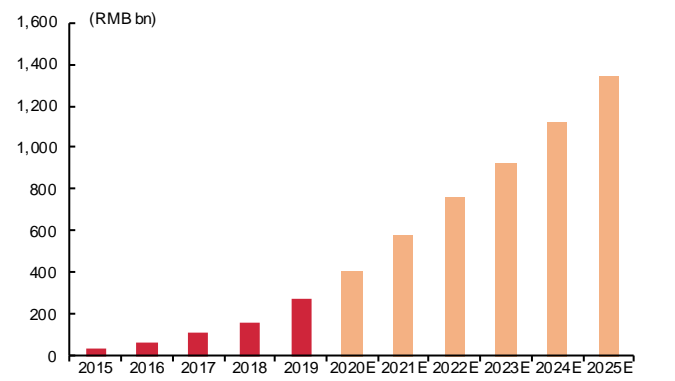
Source: iiMedia

Figure 20: China's online content market size expected to grow at 21% CAGR in 2019-25E



Source: CIC

Figure 21: China's online community market size expected to grow at 30% CAGR in 2019-25E

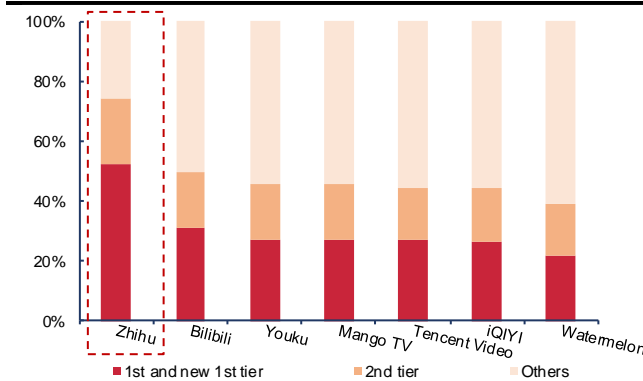


Source: CIC

Pioneering the Q&A-inspired community, with trustworthy content & high-quality users

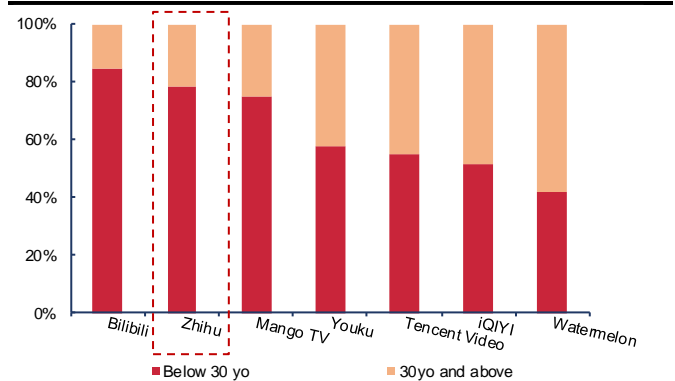
Zhihu has differentiated position with its trustworthy PUGC and high-quality user base. Compared with other content communities, Zhihu has **1) informative content with longer lifespan** than other media (e.g., short video), **2) strong supporting system for professional content creators**, with membership and CCS biz offering incentives for generating quality content, and **3) high-quality traffic and low user acquisition cost**.

Figure 22: Zhihu has more higher-tier users than other online content platforms



Source: Company data, QuestMobile

Figure 23: Zhihu has the youngest user group after Bilibili



Source: Company data, QuestMobile

We believe Zhihu faces little direct/vertical competition in China, after ByteDance's WuKong Q&A stopped operation in Jan 2021. We believe Zhihu has a more vibrant community than Dedao and Fandeng, with 3.3mn monthly active content creators and 1k content verticals in 4Q20.

We expect Zhihu to continuously divert traffic from search engine, backed by its trustworthy content and strong relationship with search engines and social networks. Compared with overseas comps, we believe Zhihu can ramp up penetration rate with multi-format and video-lization strategies.

Figure 24: Zhihu vs. domestic content paying platforms

	Zhihu	Baidu Zhidao	Wukong Q&A ¹	Dedao	Fandeng
Founded	2011	2005	2017	2016	2013
Company	Zhihu	Baidu	ByteDance	Logicreation	Shanghai Huangdou
MAU	85mn in 1Q21	548mn for Baidu app in 1Q21	1.21mn in Oct 2017 0.8mn in 2Q18	3.5mn in 1Q20, 24mn registered users in Nov 2020	45mn registered users in 2020
Content	353mn pieces in Dec 2020; 315.3mn Q&As	550mn answered questions by 2019	NA	NA	NA
Value proposition	Q&A community	Q&A community	Q&A community	Knowledge sharing	Knowledge sharing
User metrics	57% male; 75% high-tier cities; 80% below 30-year-old	NA	79% male; c. 50% lower-tier cities ²	31% 19-27 yo, 37% 28-35 yo in Nov 2020	NA
Monetization	Ad, membership, CCS, e-commerce, education	NA	NA	Ad, membership, e-commerce, education	Ad, membership, e-commerce, education

Source: Company data, QuestMobile

Note: 1) ByteDance's Wukong Q&A stopped operation in Jan 2021; 2) as of Oct 2017, according to QuestMobile

Figure 25: Zhihu vs. overseas knowledge-oriented platforms

	Zhihu	Quora	Reddit
Founded	2011	2009	2005
Company	Zhihu	Quora	Advanced Publications
MAU	76mn in 4Q20	300mn in 2018	430mn in Dec 2019
Content	353mn pieces in Dec 2020; 315.3mn Q&As	89mn answered questions by Mar 2021	303.4mn posts in 2020
Value proposition	Q&A community	Q&A community	News and discussion
User metrics	57% male; 75% high-tier cities; 80% below 30-year-old	NA	NA
Monetization	Ad, membership, CCS, e-commerce, education	Ad	Ad, membership

Source: Company data, CMBIS

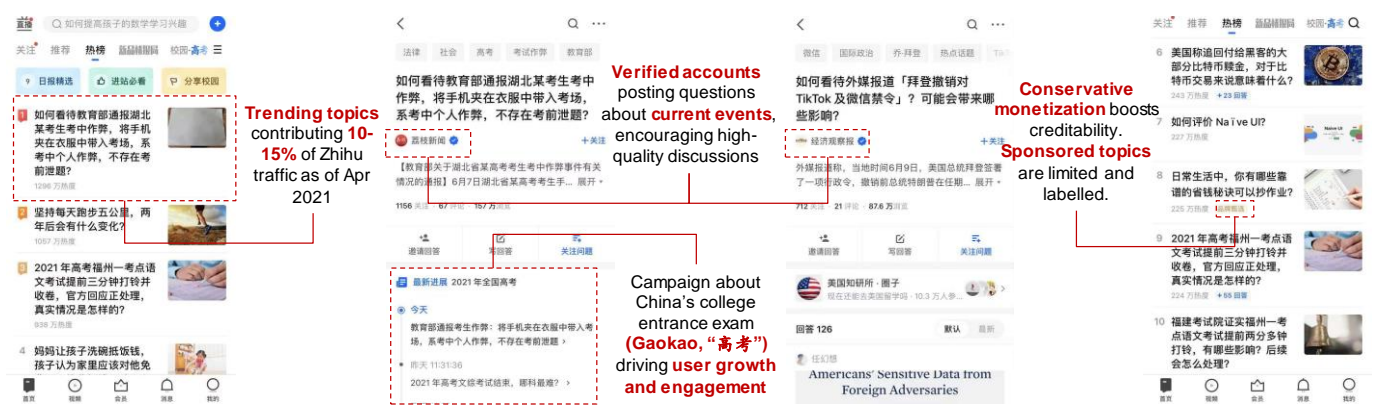
Leveraging mid-form video & enriched offerings to unlock user TAM

Initial fruits from evolving multi-format content community beyond Q&A

Zhihu diversifies content formats to attract and engage users, while prioritizing video-lization as key strategy. We believe videos and other multi-format content (e-books, lectures, live streaming, etc.) are more accessible than text-and-image Q&As. The content diversification should unlock Zhihu's potential to penetrate lower-tier cities and engage existing users.

Zhihu's trending topics (热榜) offers sought-for public sphere to discuss current events. Compared to domestic peers (e.g., Weibo), it has conservative monetization to build social trust in the rankings. Questions related to current events are frequently posted by official accounts (e.g., The Economic Observer <经济观察报>), mitigating the content risk of UGC.

Figure 26: Zhihu's "trending topics" as a trusted source for hot topics



Source: Zhihu app, company data

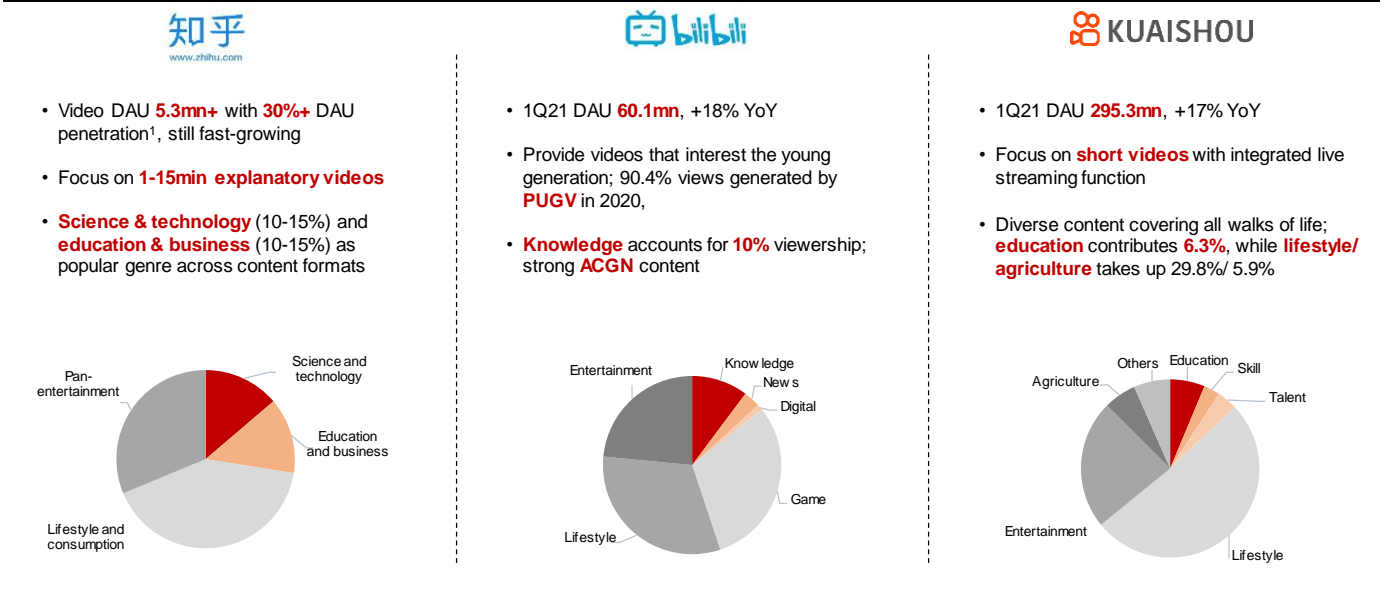
Video-lization as strategic priority

Zhihu prioritizes video-lization by focusing on explanatory, middle-form (1-15 mins) videos. We believe Zhihu's unique positioning differentiates itself from entertainment platforms and caters to underserved demand. As of Apr 2021, Zhihu's video penetration of DAUs climbed to 30%.

Zhihu can leverage its massive PUGC library to produce explanatory videos effectively. Quality scripts are the backbone of well-received explanatory videos, and Zhihu had 353mn pieces of content as of Dec 2020. We expect video penetration to continuously ramp up, as Zhihu offers series of text-to-video tools, incentive programs, and access to professional production teams.

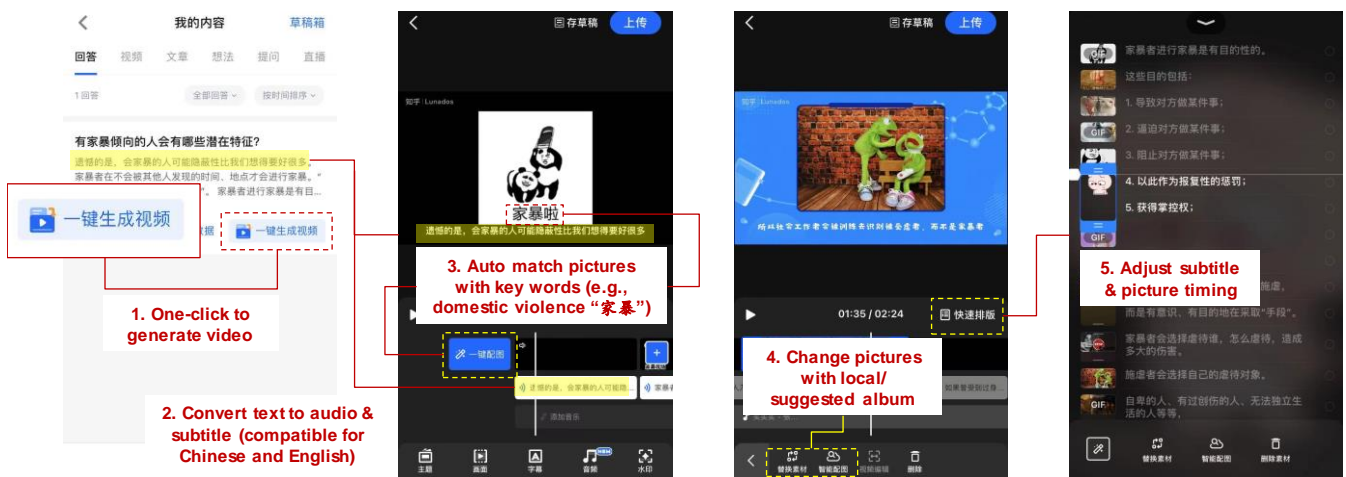
We see high visibility for Zhihu to unlock MAU ceiling with video-lization, as video content tends to be easier to consume for new users. On top of that, we anticipate video-lization to boost user engagement, as Zhihu's video users deliver higher daily time spent which is higher than that of all users.

Figure 27: Zhihu's video business vs. Bilibili and Kuaishou



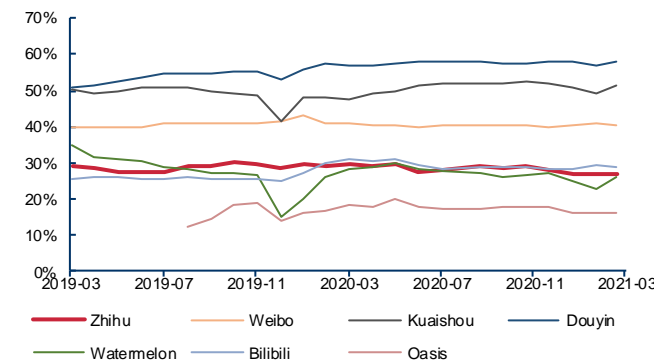
Source: Company data, QuestMobile, Kuaishou, and Bilibili
Note: 1) Estimated with Mar 2021 DAU from QuestMobile; 2) pie charts refer to overall content on each platform

Figure 28: Zhihu's PPT-video generating tool



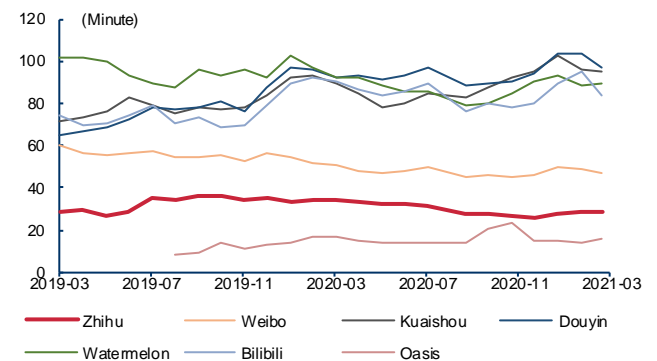
Source: Zhihu app

Figure 29: DAU/MAU ratio comparison



Source: QuestMobile

Figure 30: Daily time spent per DAU comparison



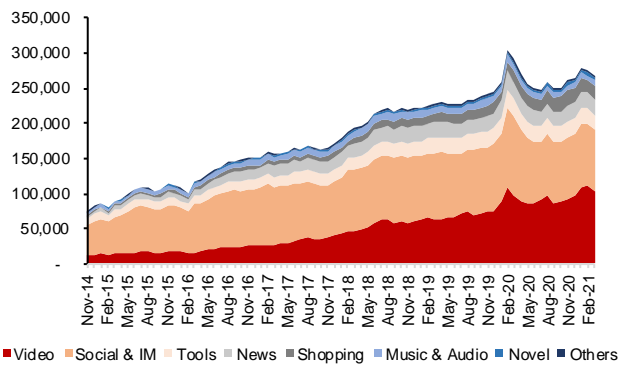
Source: QuestMobile

Targeting 300mn MAU in 2025E with effective user expansion

We believe Zhihu can effectively tap into China's growing educated population, with **1) lower-tier city penetration** through multi-format content, **2) video-lization**, and **3) converting traffic from search engine**. Compared to Zhihu's 85mn MAUs in 1Q21, Bilibili (with similar user demographic) had 200mn+ MAUs, and Quora exceeded 300mn MAUs in 2018 with c.30% penetration rate in the US.

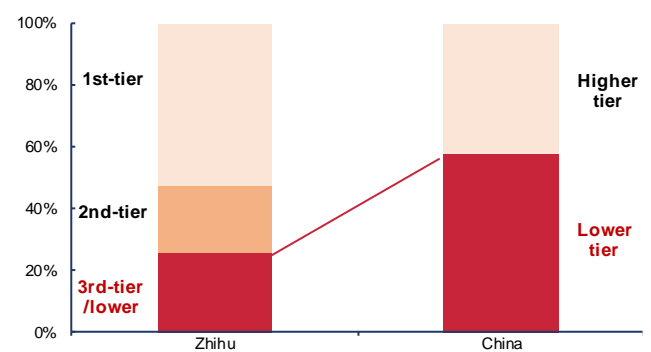
Search engine could be effective user acquisition source for Zhihu. Noted that 469mn average monthly viewers were directed to Zhihu in 4Q20, roughly 6x of its MAUs in the same period. We believe Zhihu's 300mn MAU target in 2025E is not demanding, given its huge viewer base, content diversification, and algorithm optimization.

Figure 31: Total daily time spent of Top Chinese apps



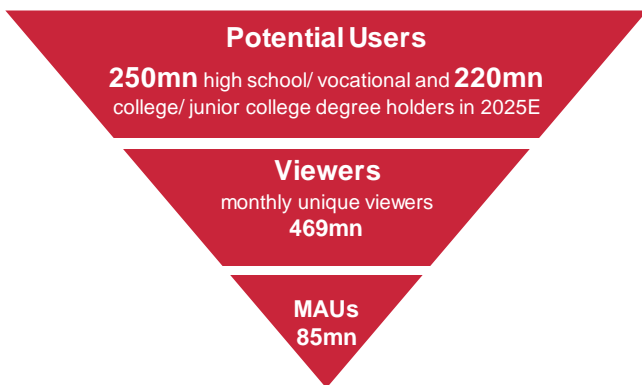
Source: QuestMobile
Note: Consisting of 193 Chinese apps monitored by QuestMobile

Figure 32: Chinese netizen by education level



Source: Company data, QuestMobile

Figure 33: Zhihu's potential user pool of educated population and existing viewers



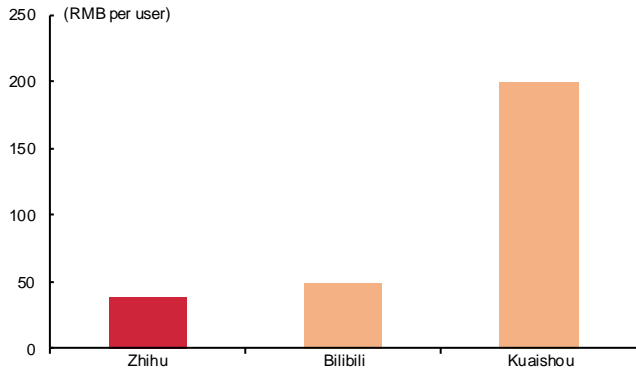
- Increasing **education level** of Chinese netizen
- Zhihu's penetration rate lags behind **Quora** (18%/ 28% in India/ US, where 17%/ 38% of Quora's traffic comes from)
- Zhihu is the **most trusted** Chinese platform in 2020, according to CIC
- The massive traffic visiting Zhihu from **search engine** can be converted to registered users/ mobile users
- Zhihu's user base is still **fast-growing**, +37.6% YoY in 1Q21

Source: Company data, QuestMobile, Kuaishou, and Bilibili

Expecting MAU to grow at 35% CAGR in FY20-23E.

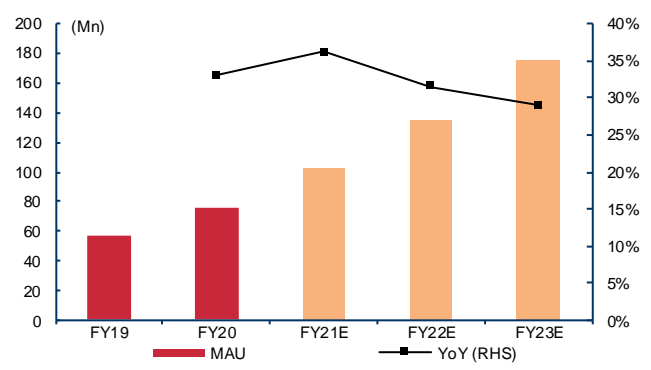
We expect its MAU to reach 167mn in FY23E, at 35% CAGR in FY20-23E. We keep confident in its user growth and TAM mainly on: 1) continuous content expansion & video-lization to target beyond high-tier cities; 2) effective traffic conversion from huge viewers; and 3) ROI-driven S&M efforts. Zhihu would see strongest net adds in 2Q21E, for Gaokao hot topic.

Figure 34: Zhihu’s user acquisition cost in 2020



Source: Company data

Figure 35: Zhihu’s MAU growth forecast



Source: Company data, CMBIS

Multi-engines for scaling up monetization, with CCS as long-term driver

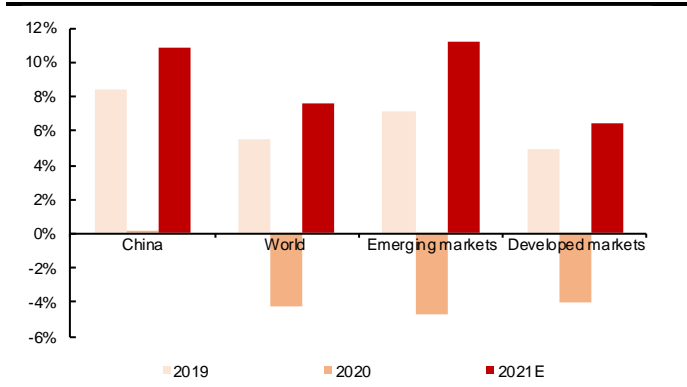
Ads: riding on the enriching content and traffic growth, while ad load stable

Zhihu is well-positioned to capture the ad recovery trend, as its ad rev per MAU lags behind peers. We expect strong ad momentum from automobile, education, and FMCG verticals this year.

We expect Zhihu's ad drivers to be: 1) 35% MAU CAGR in 2020-23E, 2) increasing user engagement with diversifying content formats and categories, and 3) innovative ads formats, such as Car Disassembly Lab (拆车实验室) for new car launch. We forecast ad load of feed ad stable at 1/6 ahead, as it's already relatively high among the peers (vs. Bilibili's c. 5%).

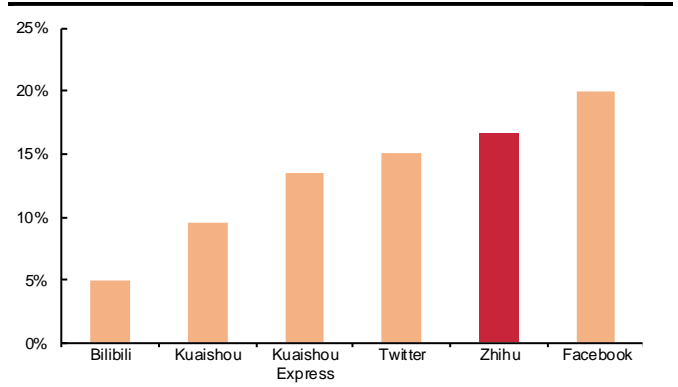
We expect Zhihu's ad rev to grow at 50% CAGR in 2020-23E, with 30% rev mix in 2023E. We anticipate gradual rev mix from ad rev to CCS, as the e-commerce solution has higher CTR and ROI.

Figure 36: Global ads recovery in 2021



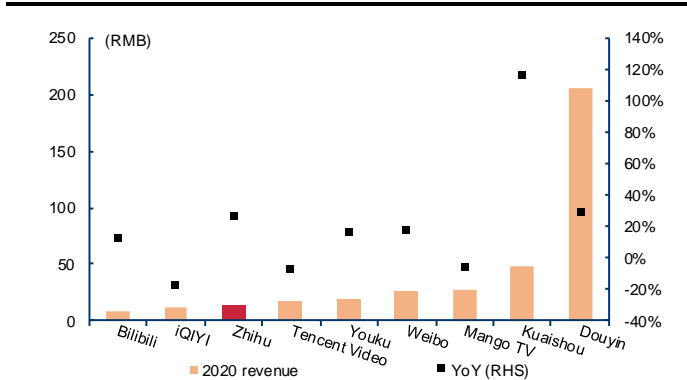
Source: Magna

Figure 37: Ad load of feed ads across platforms



Source: Company data, QuestMobile

Figure 38: Annual ads rev per MAU comparison



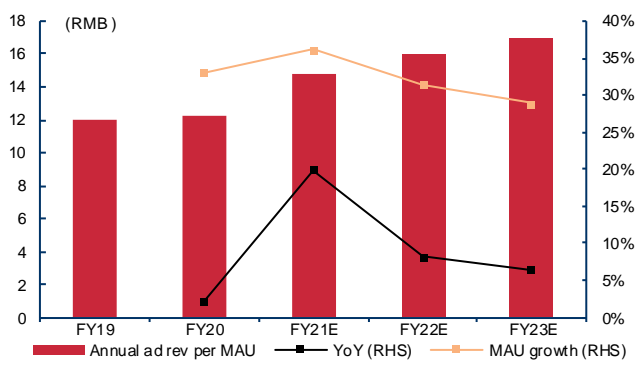
Source: Company data, QuestMobile

Figure 39: Zhihu Car Disassembly Lab <拆车实验室>



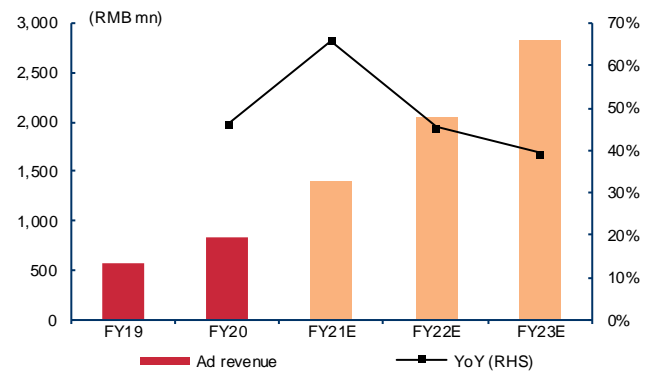
Source: Zhihu app

Figure 40: Zhihu ads rev driver forecast



Source: Company data, CMBIS

Figure 41: Zhihu's ads revenue forecast



Source: Company data, CMBIS

Paid membership: paying ratio on the rise

Zhihu is well-positioned to surf on the content paying tailwinds with increasing MAU and paying ratio. Compared to the knowledge-oriented peers, Zhihu's membership offers most diversified content formats for one price, in our view. As Yan Selection incentivizes content creators, we expect this biz to create virtuous cycle of content creation.

We forecast Zhihu's paying ratio will climb up to 4.6% in 2021E and 7.5% in 2023E, with content premiumization and diversification. As of 1Q21, Zhihu's paying ratio remained low at 4%, below Bilibili's 9.9%, while the platforms share similar user group.

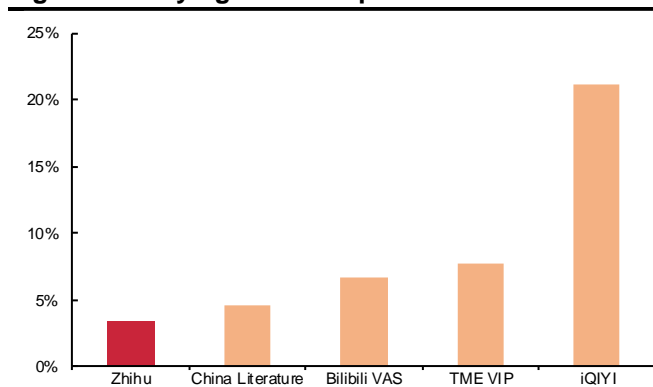
We expect Zhihu's membership ARPPU to be relatively flat in 2020-23E, at still 33% discount to Yan Selection annual sub price due to promotions. As a result, Zhihu's membership rev would grow by 75% CAGR in the next three years, with 18% rev mix in 2023E.

Figure 42: Zhihu vs. pay-for-knowledge communities

Platform	Program	Price	Privilege
Zhihu	Yan Selection	RMB19/month RMB198/year (RMB16.5/month)	<ul style="list-style-type: none"> • Live: c. 10k live sessions • E-book: 34k+ e-books and audiobooks • Yan Selection Columns: 2k+ columns • Magazines: 110k+ domestic and international magazines • Audiobook: 2.5k+ audiobooks • Gifts: gift each audiobook to 20 friends & (annual membership) 15-day VIP to 6 friends
Dedao	Audiobook	RMB35/month RMB328/year (RMB27.3/month)	<ul style="list-style-type: none"> • E-book: 36k e-books (90% of the whole library) • Magazines: YiMagazine, Harvard Business Review, etc.
	E-book	RMB21/month RMB178/year (RMB14.8/month)	<ul style="list-style-type: none"> • Gifts: gift each audiobook to 20 friends
Dedao	Jinang	RMB18/month RMB178/year (RMB14.8/month)	<ul style="list-style-type: none"> • Jinang: full access • Gifts: gift each Jinang to 20 friends
	E-book	RMB18/month RMB178/year (RMB14.8/month)	<ul style="list-style-type: none"> • Audiobook: 300+ audiobooks, with one new arrival every week • Gifts: gift trial VIP to 5 friends
Fandeng	VIP	RMB388/year (RMB32.3/month)	<ul style="list-style-type: none"> • Gifts: gift trial VIP to 5 friends
Ximalaya	VIP	RMB20/month RMB178/year (RMB14.8/month)	<ul style="list-style-type: none"> • Audiobook: 33.8k+ audiobooks and lectures

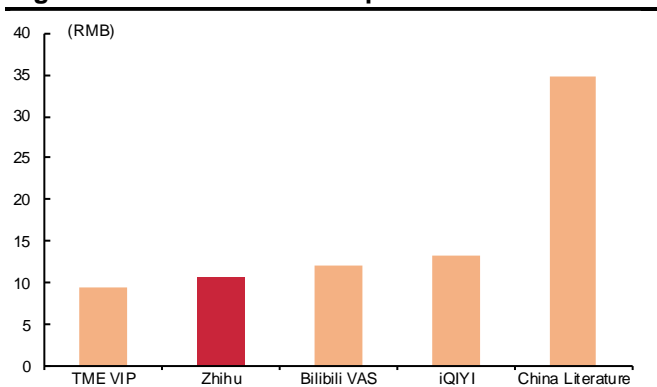
Source: Company data, CMBIS

Figure 43: Paying ratio comparison in 2020



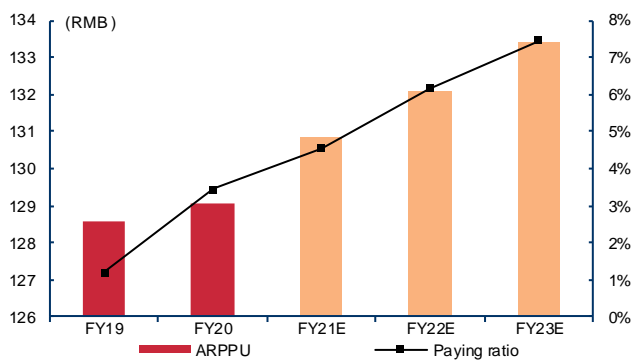
Source: Company data, CMBIS

Figure 44: ARPPU ratio comparison in 2020



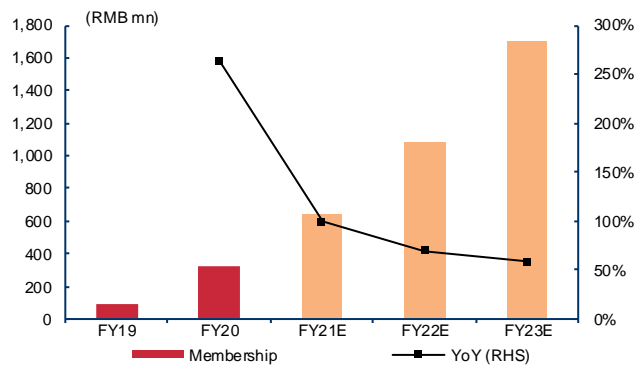
Source: Company data, CMBIS

Figure 45: Membership paying ratio & ARPPU forecast



Source: Company data, CMBIS

Figure 46: Zhihu's membership rev forecast



Source: Company data, CMBIS

CCS: long-term driver to unlock TAM

We believe CCS could be Zhihu's primary driver in the long term, backed by its superior CTR and ROI. Thanks to the platform's credibility and social trust, the CTR of Zhihu's CCS is much higher than traditional ads' <1%. CCS also shortens the decision cycle of viewers, as it connects quality content and users with specific needs.

Zhihu generates strong operating synergies with strategic shareholders, as its high-quality answers gain high rankings on search engines and social networks. If Zhihu's CCS could divert 10% of Baidu's RMB73bn ad revenue in 2020 by 2024E, its CCS could generate 55x rev growth in 2020-24E.

We expect CCS rev to grow at 215% CAGR in 2020-23E, making up 42% rev mix in 2023E, with gradual shift from traditional ad to CCS. Coupled with stepping-up monetization from e-commerce and education segment, we expect its total revenue to generate 91% CAGR in the coming three years.

Figure 47: Content commerce on Zhihu

Zhi+ mutual-selection tool

- Cooperation based on **existing** articles and answers
- Zhihu serves as a medium between advertisers and content creators
- Advertisers will obtain **extra traffic** for quality content

Zhi+ self-selection tool

- Top-tier content** creators are qualified for this solution
- Content creators use the product
- Content creators post related content and **insert Zhi+ card** (e.g., purchase link of a product) to share revenue

Zhi task platform

- Cover **2,000+** quality PU/KOL in different fields
- Cooperation based on business needs

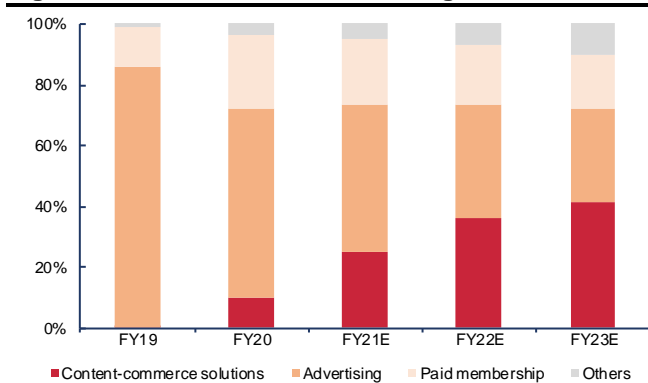
Identify suitable topics
A question about beauty product creates opportunity for content commerce

Recommend product & redirect to e-commerce platform
Content creators can insert the purchase link of recommended products into their answers, re-directing users to e-commerce platforms (e.g., Taobao, JD, Vipshop)

High-quality content
High-quality content attracts more traffic for advertisers

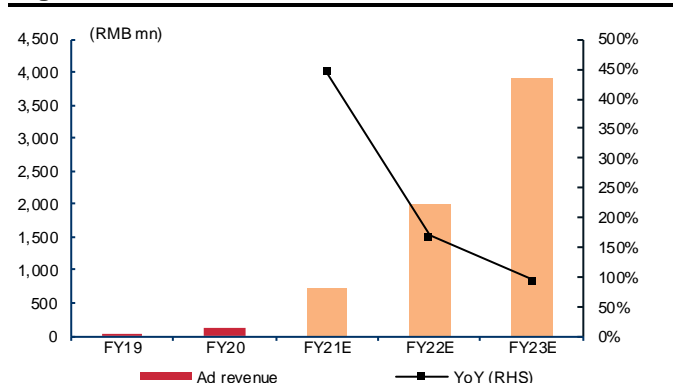
Source: Company data, Zhihu app

Figure 48: Zhihu ad rev mix shifting to CCS



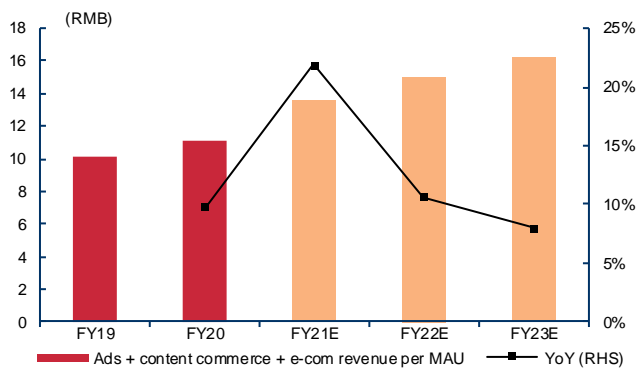
Source: Company data, CMBIS

Figure 49: Zhihu's CCS rev forecast



Source: Company data, CMBIS

Figure 50: Ad, CCS and e-commerce per MAU



Source: Company data, CMBIS

Financial Analysis

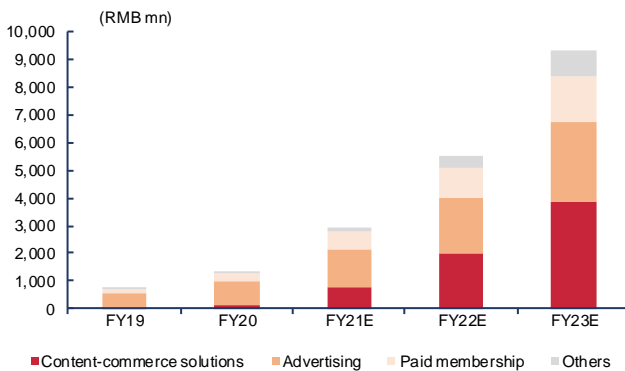
Revenue Breakdown

We forecast Zhihu revenue to grow at **116%/88%/70%** in **FY21/22/23E**, driven by MAU growth, video-lization, and stepping-up monetization. By segment, we expect ad/ paid membership/ CCS to deliver 50%/ 75%/ 206% revenue CAGR in 2020-23E, with gradual rev mix shift from traditional ad to CCS due to high CTR.

Key topline drivers come from:

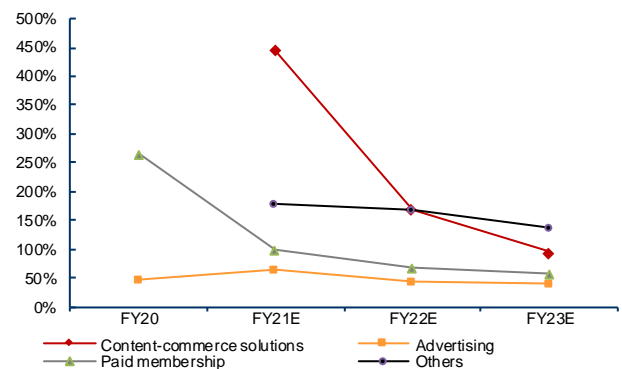
- 1) **Ad:** forecasting 50% rev CAGR in FY20-23E, mainly driven by growing MAU and increasing engagement. We expect ad load of feed ad stable at 1/6, while monthly ad rev per MAU to grow at 11% CAGR in FY20-23E, with better targeting and longer time spent.
- 2) **Paid membership:** we expect Zhihu's paid membership to deliver 75% CAGR in FY20-23E. The primary drivers are MAU growth and rising paying ratio, thanks to users' increasing willingness to pay and Zhihu's content enrichment.
- 3) **CCS:** we anticipate CCS to be Zhihu's key driver in the long term, with its superior CTR and ROI. We forecast Zhihu's CCS would grow at 206% CAGR in 2020-23E, contributing 41.6% rev mix in 2023E.
- 4) **Other:** as innovative biz such as e-commerce and education gains traction, we forecast other business to deliver 160% CAGR in FY20-23E, with 9.9% rev mix in 2023E.

Figure 51: Rev estimates



Source: Company data, CMBIS estimates

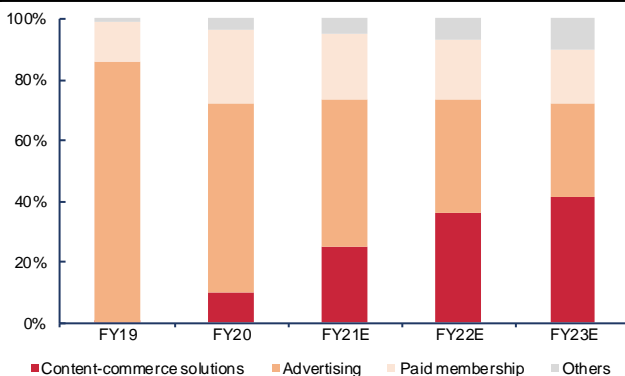
Figure 52: Rev growth breakdown



Source: Company data, CMBIS estimates

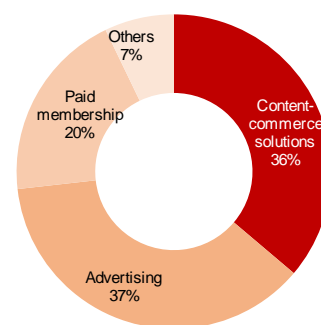
Note: FY20 CCS & other rev growth excluded due to low base

Figure 53: Rev mix trend



Source: Company data, CMBIS estimates

Figure 54: FY22E revenue breakdown



Source: Company data, CMBIS estimates

Income Statement

We expect Zhihu to achieve breakeven in FY23E, with effective operating leverage to offset increasing content investment.

We anticipate its GPM up to 59% in FY23E, primarily driven by operating leverage in cloud service cost. With Zhihu's content enrichment, we expect its content cost to increase to 16-18% of revenue in 2021-23E, from 9.5% in 2020.

Backed by operating leverage and improving ecosystem, we expect its S&M/R&D/G&A expense ratio to improve to 38.5%/14.6%/9.3% in FY23E, from 54.3%/24.4%/21.9% in FY20.

As a result, we expect Zhihu's adj. net income to reach RMB252mn in FY23E, with adj. net margin at 3%.

Figure 55: Income statement

RMB mn, Dec-YE	FY19	FY20	FY21E	FY22E	FY23E
Net revenue	671	1,352	2,926	5,498	9,363
Cost of revenue	(358)	(594)	(1,324)	(2,423)	(3,793)
Gross profit	312	758	1,602	3,075	5,570
R&D exp	(351)	(330)	(496)	(880)	(1,372)
S&M exp	(766)	(735)	(1,454)	(2,303)	(3,608)
G&A exp	(253)	(296)	(451)	(719)	(872)
Operating (loss)/profit	(1,058)	(603)	(800)	(827)	(282)
Other income	54	86	42	74	94
Profit before income tax	(1,004)	(516)	(758)	(754)	(187)
Income taxes (expense)/credit	(0)	(1)	(1)	0	0
Profit for the year	(1,004)	(518)	(758)	(754)	(187)
Accretions of convertible redeemable preferred shares to redemption value	(427)	(681)	(171)	0	0
Net loss attributable to Zhihu Inc.'s shareholders	(1,431)	(1,198)	(929)	(754)	(187)
Adj. net profit	(825)	(337)	(470)	(426)	252
Margin Analysis					
Gross margin	47%	56%	55%	56%	59%
Operating margin	-158%	-45%	-27%	-15%	-3%
Adj. net margin	-123%	-25%	-16%	-8%	3%
Growth Analysis					
Revenue		102%	116%	88%	70%
Gross profit		143%	111%	92%	81%
Operating profit		NA	NA	NA	NA
Adj. net profit		NA	NA	NA	NA

Source: Company data, CMBIS estimates

Balance Sheet

According to our estimates of profit before taxation and change in working capital, Zhihu has solid operating cash flow & financing cash flow in supporting CAPEX in the next three years. We expect Zhihu to hold RMB5,984mn/RMB5,873mn/RMB6,745mn cash and cash equivalent as of 31 Dec of 2021/22/23E.

Figure 56: Balance Sheet

RMB mn, Dec-YE	FY19	FY20	FY21E	FY22E	FY23E
Non-current assets	82	41	65	83	116
Property and equipment, net	15	8	17	33	59
Intangible assets, net	35	23	22	23	30
Right-of-use assets	26	3	26	26	26
Others	7	6	0	0	0
Current assets	3,902	3,720	9,609	10,218	12,077
Cash and cash equivalents	900	958	5,984	5,873	6,745
Term deposits	1,151	1,093	1,093	1,093	1,093
Short-term investments	1,492	1,046	1,046	1,046	1,046
Other current asset	358	623	1,486	2,206	3,193
Current liabilities	763	1,015	2,111	3,164	4,803
Accounts payables and accrued liabilities	287	502	1,074	1,394	1,819
Salary and welfare payables	207	232	311	544	957
Contract liabilities	107	160	664	1,125	1,780
Others	162	121	62	101	247
Non-current liabilities	3	0	0	0	0
Long term lease liabilities	3	0	0	0	0
Total mezzanine equity and shareholders' equity	3,218	2,747	7,563	7,138	7,389

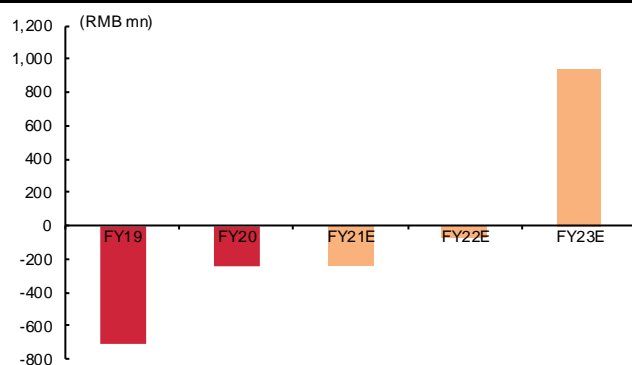
Source: Company data, CMBIS estimates

Cash Flow and Working Capital

Healthy operating cash flow ahead

With rapid user growth, enhancing monetization, and effective operating leverage, we anticipate Zhihu to generate solid operating cash inflows starting from FY23E. Factoring effective working capital management, we expect Zhihu to record RMB938mn of OCF inflow in FY23E, respective.

Figure 57: Operating cash flow projections



Source: Company data, CMBIS estimates

Figure 58: Cash flow and working capital analysis

RMB mn, Dec-YE	FY19	FY20	FY21E	FY22E	FY23E
Cash Flow					
Operating cash flow	(716)	(244)	(240)	(72)	938
CAPEX	(6)	(2)	(20)	(38)	(66)
Others	(2,097)	432	0	0	0
Investing cash flow	(2,102)	430	(20)	(38)	(66)
Proceeds from issuance of convertible redeemable preferred shares	3,011	0	0	0	0
IPO proceeds	0	0	5,286	0	0
Others	(13)	9	0	0	0
Financing cash flow	2,998	9	5,286	0	0
Cash at period end	900	958	5,984	5,873	6,745

Source: Company data, CMBIS estimates

Valuation

Investment Thesis

We initiate with BUY at DCF-based TP of US\$16.0, implying 20.0x/10.6x FY21/22E P/S. We believe Zhihu can maintain its leadership in Q&A-inspired content communities with trustworthy content, enriched content formats, and vibrant community. Zhihu's positive price drivers and catalysts would originate from: 1) strong user growth and engagement in Gaokao period & summer holiday; 2) deeper video penetration; and 3) better-than-expected monetization.

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 in the long term. Assuming a WACC of 12.3% and a terminal growth rate of 3%, our estimate TP is US\$16.0, representing 20.0x/10.6x FY21/22E PS.

Figure 59: DCF valuation

DCF valuation (RMB mn)										
	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
EBIT	(800)	(827)	(282)	190	1,133	2,051	3,214	4,672	6,367	8,215
Tax	(1)	0	0	(49)	(200)	(363)	(568)	(826)	(1,126)	(1,453)
D&A	14	20	33	48	67	73	81	89	98	108
Working capital	217	333	653	564	1,852	1,889	1,927	1,965	2,005	2,045
CAPEX	(20)	(38)	(66)	(99)	(136)	(149)	(164)	(181)	(199)	(219)
FCF	(591)	(512)	339	654	2,716	3,501	4,489	5,719	7,144	8,696
FCF Growth		NA	NA	93%	315%	29%	28%	27%	25%	22%
Terminal Value										95,966
PV (FCF+ Terminal Value)	(591)	(456)	268	462	1,705	1,957	2,234	2,534	2,818	36,747

Assumptions	
WACC	12.3%
Tax rate	20.0%
Risk free rate	3.2%
Beta	1.10
Market risk return	11.5%
Cost of equity	12.3%
Debt/Assets	0.0%
WACC	12.3%
Terminal growth rate	3.0%
Debt value	0

		WACC				
		10.3%	11.3%	12.3%	13.3%	14.3%
Growth	1.5%	18.8	16.4	14.4	12.9	11.6
	2.0%	19.6	17.0	14.9	13.2	11.9
	2.5%	20.5	17.6	15.4	13.6	12.2
	3.0%	21.5	18.4	16.0	14.0	12.5
	3.5%	22.7	19.2	16.6	14.5	12.8
	4.0%	24.0	20.2	17.3	15.0	13.2
	4.5%	25.6	21.3	18.0	15.6	13.7

Equity Value	
PV	47,679
minus: Net cash	5,984
minus: Minority Interest	0
Equity Value	53,663
Shares (mn)	523
Target Price (US\$) based on DCF	16.0

Source: Company data, Bloomberg, CMBIS estimates

Note: FX = 6.43

Peers comparison

As a crosscheck, we select two content community companies, eight VAS companies, two advertisement companies, and four overseas communities for comparison.

We believe Bilibili (BILI US) is the most comparable company, with differentiated positioning, quality and growing user base, and early but diversified monetization. As Zhihu targets 300mn MAU by 2025E (vs. 85mn MAUs in 1Q21), we believe its user expansion trajectory is comparable with Bilibili's (209mn MAU in 1Q21, targeting 400mn in 2023E).

Our TP valuation at 10.6x FY22E P/S is similar to Bili's current trading multiple. We view it not demanding, given its highest topline growth and relatively low direct competition pressure.

Figure 60: Peers valuation

Company	Ticker	Mkt cap (USD mn)	Currency	Price	CMBI Rating	CMBI TP	PE			PS			EV/EBITDA			FY0-2 EPS
							FY0	FY1	FY2	FY0	FY1	FY2	FY0	FY1	FY2	CAGR
Zhihu	ZH US	7,344	USD	13	BUY	16	NA	NA	190.3	16.4	8.7	5.1	NA	NA	109.0	NA
Online Community																
Bilibili	BILI US	48,261	USD	126	BUY	154	NA	NA	NA	16.0	11.2	8.3	NA	NA	367.6	NA
Kuaishou	1024 HK	108,424	HKD	202	BUY	382	NA	156.8	44.2	8.1	5.7	4.2	NA	78.6	26.1	NA
Average							NA	156.8	44.2	12.0	8.4	6.3	NA	78.6	196.8	NA
VAS																
China Literature	772 HK	11,489	HKD	88	NA	NA	53.7	41.9	34.5	7.1	6.1	5.3	44.8	36.9	28.8	25%
Tencent	700 HK	729,803	HKD	591	BUY	753	33.2	26.7	21.9	8.0	6.6	5.6	23.2	19.6	17.1	23%
JOYY	YY US	5,472	USD	69	BUY	132	NA	106.6	38.9	1.9	1.5	1.2	27.0	7.5	6.5	NA
Huya	HUYA US	4,170	USD	18	BUY	24	35.5	18.3	14.5	2.2	1.9	1.7	35.3	12.3	9.3	57%
Douyu	DOYU US	2,339	USD	7	NA	NA	NA	23.0	26.7	1.5	1.3	1.2	NA	16.5	10.7	NA
TME	TME US	26,844	USD	16	BUY	20	37.8	28.9	22.1	5.0	4.2	3.5	36.5	25.5	19.1	31%
Mango	300413 CH	19,096	CNY	69	NA	NA	49.0	39.8	33.6	6.7	5.5	4.7	17.2	14.2	12.1	21%
iQIYI	IQ US	12,423	USD	16	BUY	25	NA	NA	3768.2	2.5	2.2	2.0	NA	NA	31.4	NA
Average							41.8	40.8	27.5	4.4	3.7	3.2	31.4	18.9	16.9	31%
Ad																
Baidu	BIDU US	73,433	USD	208	BUY	336	21.4	18.3	15.0	3.7	3.2	2.8	13.2	11.6	9.7	20%
Weibo	WB US	11,869	USD	52	NA	NA	19.7	16.8	14.6	5.6	5.0	4.5	16.9	14.0	12.0	16%
Average							20.6	17.6	14.8	4.6	4.1	3.7	15.0	12.8	10.9	18%
Overseas Com Overseas Community																
Facebook	FB US	997,772	USD	352	NA	NA	24.8	21.4	18.8	8.6	7.2	6.1	15.2	12.8	10.9	15%
Netflix	NFLX US	236,555	USD	534	NA	NA	49.2	40.6	31.9	8.0	6.9	6.0	36.1	29.1	22.9	24%
Snapchat	SNAP US	102,942	USD	68	NA	NA	363.3	121.3	53.5	26.4	17.9	12.4	255.6	86.0	41.4	160%
Twitter	TWTR US	55,071	USD	69	NA	NA	88.5	63.1	44.7	11.5	9.3	7.7	38.0	28.8	22.7	41%
Average							54.1	41.7	37.2	13.6	10.3	8.0	29.8	39.2	24.5	60%
Average							37.5	34.3	29.6	7.7	6.0	4.8	27.6	28.1	18.7	39%

Source: Bloomberg

Note: Data updated by 30 Jun 2021; Bilibili, Kuaishou, YY, IQ, and Snapchat were excluded as outliers for average calculation

Key Investment Risks

Key investment risks may derive from: 1) other emerging platforms diverting time and wallet share from Zhihu, 2) slower-than-expected video penetration, and 3) content risk on UGC platforms.

Other emerging platforms diverting time and wallet share from Zhihu

Zhihu faces intensified competition from other online knowledge and entertainment platforms in China. While we believe Zhihu is likely to maintain its leadership in the Q&A-inspired industry with differentiated, informative content, existing and emerging entertainment platforms (e.g., short video companies) may divert user time and wallet away from Zhihu. Other popular platforms may also expand their content category to knowledge sharing to engage Zhihu in more direct competition.

Slower-than-expected video penetration

Zhihu is actively integrating video in its content offerings, and its video penetration reached 30% of its DAUs as of Apr 2021. If Zhihu fails to convert its massive Q&A library to high-quality videos, or fails to attract knowledge content creators to continuously produce PUGC videos, its video-lization strategy may proceed slower than expected. As a result, other platforms may surf the video tailwinds and divert user time and wallet share away from Zhihu.

Content risk on UGC platforms

As a UGC community, Zhihu faces the content risk that its UGC topics, questions, and answers may breach related laws and regulations. As current event-related questions are frequently posted by verified accounts, and Zhihu holds multiple programs to report controversial content, we believe its content risk is controllable. However, if Zhihu fails to effectively manage the content risk on its platform, its operational and financial results may be adversely affected.

Financial Summary

Income statement

YE 31 Dec (RMB mn)	FY19A	FY20A	FY21E	FY22E	FY23E
Revenues	671	1,352	2,926	5,498	9,363
CCS	1	136	741	1,990	3,894
Advertising	577	843	1,400	2,036	2,835
Paid membership	88	320	637	1,080	1,708
Others	4	53	147	393	926
COGS	(358)	(594)	(1,324)	(2,423)	(3,793)
Gross profit	312	758	1,602	3,075	5,570
S&M	(766)	(735)	(1,454)	(2,303)	(3,608)
R&D	(351)	(330)	(496)	(880)	(1,372)
G&A	(253)	(296)	(451)	(719)	(872)
Operating profit	(1,058)	(603)	(800)	(827)	(282)
Other income	54	86	42	74	94
Pre-tax Income	(1,004)	(516)	(758)	(754)	(187)
Income Tax	(0)	(1)	(1)	0	0
Net profit	(1,004)	(518)	(758)	(754)	(187)
Accretions	(427)	(681)	(171)	0	0
Net profit to shareholder	(1,431)	(1,198)	(929)	(754)	(187)
Adj. net profit	(825)	(337)	(470)	(426)	252

Cash flow summary

YE 31 Dec (RMB mn)	FY19A	FY20A	FY21E	FY22E	FY23E
Net income	(1,004)	(518)	(758)	(754)	(187)
D&A	20	20	14	20	33
Change in WC	85	(10)	217	333	653
Others	183	264	288	328	439
Operating CF	(716)	(244)	(240)	(72)	938
CAPEX	(6)	(2)	(20)	(38)	(66)
Others	(2,097)	432	0	0	0
Investing CF	(2,102)	430	(20)	(38)	(66)
Issuance of shares	3,011	0	0	0	0
IPO proceeds	0	0	5,286	0	0
Others	(13)	9	0	0	0
Financing CF	2,998	9	5,286	0	0
Net change in cash	180	195	5,026	(111)	872
Cash (beg of yr)	713	900	958	5,984	5,873
Fx effect	7	(138)	0	0	0
Cash (end of yr)	900	958	5,984	5,873	6,745

Balance sheet

YE 31 Dec (RMB mn)	FY19A	FY20A	FY21E	FY22E	FY23E
Non-current assets	82	41	65	83	116
PP&E	15	8	17	33	59
Intangible assets, net	35	23	22	23	30
Right-of-use assets	26	3	26	26	26
Others	(0)	0	0	0	0
Current assets	3,902	3,720	9,609	10,218	12,077
Cash, cash equivalents	900	958	5,984	5,873	6,745
Term deposits	1,151	1,093	1,093	1,093	1,093
Short-term investments	1,492	1,046	1,046	1,046	1,046
Other current asset	0	0	0	0	0
Current liabilities	763	1,015	2,111	3,164	4,803
AP and accruals	287	502	1,074	1,394	1,819
Salary welfare payables	207	232	311	544	957
Contract liabilities	107	160	664	1,125	1,780
Others	0	0	0	0	0
Non-current liabilities	3	0	0	0	0
Lease liabilities	3	0	0	0	0
Mezzanine equity and shareholders' equity	3,218	2,747	7,563	7,138	7,389

Key ratios

YE 31 Dec	FY19A	FY20A	FY21E	FY22E	FY23E
Sales mix (%)					
CCS	0.1	10.0	25.3	36.2	41.6
Advertising	86.1	62.4	47.9	37.0	30.3
Paid membership	13.1	23.7	21.8	19.6	18.2
Others	0.7	3.9	5.0	7.1	9.9
Total	100.0	100.0	100.0	100.0	100.0
Growth rate (%)					
Revenue	NA	101.7	116.4	87.9	70.3
Gross profit	NA	142.7	111.4	92.0	81.1
EBIT	NA	(43.0)	32.7	3.4	(66.0)
Adj. net profit	NA	(59.1)	39.3	(9.4)	(159.1)
P&L ratios (%)					
Operating margin	(157.9)	(44.6)	(27.3)	(15.0)	(3.0)
Pre-tax margin	(149.8)	(38.2)	(25.9)	(13.7)	(2.0)
Adj. net margin	(123.0)	(25.0)	(16.1)	(7.7)	2.7
Effective tax rate	0.0	0.2	0.1	0.0	0.0
Returns (%)					
ROE	(25.6)	(12.3)	(6.2)	(6.0)	3.4
ROA	(20.7)	(9.0)	(4.9)	(4.1)	2.1
Per share					
EPS (RMB)	(2.0)	(0.7)	(0.8)	(0.7)	0.4
DPS (RMB)	1.0	2.0	3.0	4.0	5.0
BVPS (RMB)	37.4	41.0	43.2	47.9	54.4

Source: Company data, CMBIS estimates

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