

## Cloud Music (9899 HK)

# Monetization and margin improvement on the horizon

Initiate at BUY. Cloud Music is the second largest online music platform in China in terms of both revenue and MAU, taking 19% market share of China's online music revenue per iResearch and our estimate in 2021. Compared to the market leader TME, Cloud Music remains at early stage of monetization, with ample room for revenue growth and margin improvement. We expect Cloud Music to benefit from the secular trend of rising paying ratio, growing ARPPU and rationalizing music licensing costs in the China online music sector. We forecast total revenue CAGR of 26.0% over 2021-2024E, and adjusted net income of RMB75/535mn in 2023/2024E (vs. adjusted net loss of RMB1,044/346mn in 2021/2022E). Our DCF-derived target price is HK\$110.0, which translates into 2.2x/1.8x 2022/2023E PS. Initiate at BUY.

- Online music market evolves for better economics. Total online music market size is expected to deliver a CAGR of 17.6% over 2021-2025E and reach RMB33bn in 2025E, per iResearch, driven by climbing paying ratio and monthly ARPPU. China's online music sector paying ratio remained low at 13.8% in 2021, versus other major regions (Europe/North America/Latin America/rest of world: 54/56/42/22%). We expect several factors to drive increase in paying ratio and ARPPU, as well as improving business economics: 1) industry-wide secular shift towards pay-for-streaming model; 2) better protection of music copyright; 3) anti-trust law is guiding industry into rational competition and profit-sharing mode with music labels.
- Cloud Music user base remains under-monetized. Cloud Music's total revenue per MAU was RMB38.3 in 2021, equivalent to 76% of TME's total revenue per MAU. We expect enriching content library and innovation in social features will help boost paying ratio for online music and social entertainment businesses. We forecast total revenue CAGR of 26.0% over 2021-2024E, with online music/social entertainment revenue CAGR of 19.0/31.7%. Online music/social entertainment business will account for 39.6/60.4% of total revenue in 2024E, versus 47.0/53.0% in 2021.
- Ongoing margin expansion supported by several key drivers. We forecast adjusted net margin of +0.6/3.8% in 2023/2024E, up from -14.9/3.8% in 2021/2022E, mainly attributable to 1) rationalizing music licensing costs as the regulator banned music copyright exclusivity in 2021; 2) increase in revenue contribution from higher-GPM social entertainment business (from 53.0% in 2021 to 60.4% in 2024E); and 3) increasing revenue scale which gives further room for opex optimization. Cloud Music is trading at only 1.1x 23E PS, a discount to TME's (1.3x), offering an attractive risk-reward given its robust revenue growth that outpaces its peer.

#### **Earnings Summary**

| J                             |              |           |          |         |        |
|-------------------------------|--------------|-----------|----------|---------|--------|
| (YE 31 Dec)                   | FY20A        | FY21A     | FY22E    | FY23E   | FY24E  |
| Revenue (RMB mn)              | 4,896        | 6,998     | 9,092    | 11,595  | 14,006 |
| YoY growth (%)                | 111.2        | 42.9      | 29.9     | 27.5    | 20.8   |
| Gross margin (%)              | (12.2)       | 2.0       | 12.9     | 17.0    | 20.0   |
| Operating profit (RMB mn)     | (1,525)      | (1,347)   | (527)    | (112)   | 388    |
| Net profit (RMB mn)           | (2,951.5)    | (2,056.1) | (454.8)  | (40.8)  | 395.2  |
| Adjusted net profit (RMB mn)  | (1,568.0)    | (1,043.7) | (345.7)  | 75.2    | 535.2  |
| EPS (Reported) (RMB cents)    | (2,416.72)   | (989.66)  | (218.64) | (19.61) | 189.98 |
| EPS (Adjusted) (RMB cents)    | (1,283.90)   | (502.37)  | (166.19) | 36.14   | 257.32 |
| P/S (x)                       | 2.6          | 1.8       | 1.4      | 1.1     | 0.9    |
| P/E (x)                       | na           | na        | na       | na      | 31.8   |
| Source: Company data, Bloombe | rg, CMBIGM e | stimates  | •        |         | •      |

# BUY (Initiation)

Target Price HK\$110.00 Up/Downside 67.9% Current Price HK\$65.50

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#### Stock Data

| Mkt Cap (HK\$ mn)        | 13,623.7 |
|--------------------------|----------|
| Avg 3 mths t/o (HK\$ mn) | 70.1     |
| 52w High/Low (HK\$)      | NA/NA    |
| Total Issued Shares (mn) | 208.0    |
|                          |          |

Source: FactSet

#### **Shareholding Structure**

| NetEase | 61.4% |
|---------|-------|
| Alibaba | 9.9%  |

Source: Company data

#### **Share Performance**

|       | Absolute | Relative |
|-------|----------|----------|
| 1-mth | -9.7%    | 2.8%     |
| 3-mth | -7.6%    | 17.3%    |
| 6-mth | -3.2%    | 23.5%    |

Source: FactSet

#### 12-mth Price Performance



Source: FactSet



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## Investment thesis

## Online music entertainment market offers ample opportunities

China's online music services market has undergone structural changes in both competition dynamics and user behaviour. According to iResearch, total online music market size will deliver a CAGR of 17.6% over 2021-2025E and reach RMB33bn in 2025E, driven by growth in both paying ratio and monthly ARPPU. The membership paying ratio of China's online music sector was low at 13.8% in 2021, versus both developed markets (Europe/North America: 53.7/55.9%) and emerging markets (Latin America/rest of world: 42.2/22.2%). Due to competition, the music subscription packages in China are also priced low at RMB8.0 per month, the lowest among all prices set for music subscription plans in major countries including emerging markets like India/Egypt/South Africa (RMB17.5/18.4/23.9 per month). Looking forward, we expect several key factors to drive the increase in paying ratio and ARPPU: 1) continuous adoption of the pay-for-streaming business model; 2) better protection of music copyright in China; 3) anti-trust laws are guiding the industry to compete on rational business logics, music platforms are evolving into profit sharing model with copyrights owners, establishing sustainable business ROE, competing on service quality and innovations to excel peers.

China's music-centric social entertainment market entered a steady growth stage, due to the strengthening live streaming regulations and decelerating user traffic growth. Based on iResearch data, China's music-centric social entertainment services market revenue will grow at a CAGR of 5.6% over 2021-2025E and reach RMB40.7bn in 2025E. That said, given its better margin profile, the social entertainment business continues to generate decent cash flow to fuel growth of online music platforms.

## Business development offers ample monetization potential

According to iResearch and our estimate, TME/Cloud Music represented 67/19% of China's online music market revenue, and 60/11% of China's music-centric social entertainment market revenue in 2021. The two platforms together operated the top four online music apps in terms of MAUs, with their user base significantly higher than the other players. Cloud Music that remains at early stage of monetization compared to TME. Cloud Music's total revenue per MAU was RMB38.3 in 2021, equivalent to 76% of TME's total revenue per MAU. We expect enriching content library and innovation in social features to further drive paying ratio for both online music and social entertainment businesses. We forecast total revenue to deliver a CAGR of 26.0% over 2021-2024E, with online music/social entertainment revenue CAGR of 19.0/31.7%.

We forecast adjusted net margin of +0.6/3.8% in 2023/2024E, up from -14.9/3.8% in 2021/2022E, mainly attributable to 1) rationalizing music licensing costs as the regulator banned music copyright exclusivity in 2021; 2) increase in revenue contribution from higher-GPM social entertainment business (from 53.0% in 2021 to 60.4% in 2024E); and 3) operating efficiency improvement.

#### Catalysts: Increasing monetization and margins improvement

Cloud Music is trading at 1.1x 2023E PS, which is at a discount to that of TME (1.3x 2023E PS). Its market cap per MAU was only US\$9.6, the lowest among its peers (Kuaishou/Spotify/BiliBili/TME: US\$37.3/39.4/14.5/11.1). Its current valuation offers an attractive risk-reward in our view, given Cloud Music's strong revenue CAGR and margin improvement potential over 2021-2024E. Our target price of Cloud Music is HK\$110.0 based on DCF Valuation, which implies 2.2x/1.8x 2022/2023E PS.



## Cloud Music: comprehensive online music ecosystem

Cloud Music is the second largest online music platform in China in terms of both MAU and total revenue. It developed a vibrant online music community with average MAUs of 182mn and DAU/MAU ratio well above 30% in 1H22. The highly-engaged DAU spent on average 80.6 minutes per day on the Cloud Music in 1H22. Since 2013, Cloud Music, as the music arm of NetEase content ecosystem, has started to offer music streaming services and continued to diversify its music-centric service offerings.

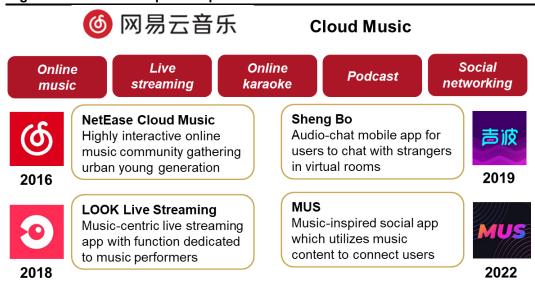
Figure 1: Cloud Music: key milestone

| Year | Event   |
|------|---|
| 2013 | NetEase introduced music streaming function   |
| 2016 | NetEase Cloud Music began to operate on a stand-alone basis   |
| 2018 | Cloud Music introduced live streaming function and launched the stand-alone mobile app LOOK Live Streaming  |
| 2019 | Cloud Music introduced the Village, a multimedia, content-based social function allowing users to post and discover various forms of music and music-inspired content |
| 2020 | Cloud Music introduced Cloud Circle, a way for music fans to form groups based on various themes, topics, interest and need, and share content with their groups      |
| 2022 | Cloud Music launched MUS, a new music-inspired social networking app, which strives to utilize music content to connect users   |

Source: Company data, CMBIGM

Cloud Music has built a comprehensive online music ecosystem that offers a wide spectrum of music-centric services and products. 1) NetEase Cloud Music: a one-stop online music platform that offers music streaming, live streaming, audio books, and online karaoke services; 2) LOOK Live streaming: a music-centric live streaming platform which focuses on offering video & audio live streaming services; 3) MUS: a music-inspired social app that connects users via their interests in music.

Figure 2: Cloud Music: product portfolio





On the monetization front, Cloud Music's online music segment (accounting for 41.9% of total revenue in 1H22) mainly generates revenue through the membership subscription, ad services, sales of digital albums and sublicensing. The social entertainment segment (accounting for 58.1% of total revenue in 1H22) mainly offers live streaming services, which generate revenue via sales of virtual gift.

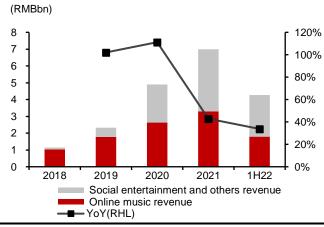
Figure 3: Cloud Music: monetization

| Segment              | Services                | Offerings   |
|----------------------|-------------------------|---|
|                      | Membership services     | <ol> <li>Basic music subscription packages priced at RMB8 per month, with a fixed number of<br/>downloads per month and access to premium content.</li> <li>Vinyl VIP membership priced at RMB18 per month, with additional features such as various<br/>sound effects, an ad-free experience, and additional personalized app themes.</li> </ol> |
| Online music         | Advertising services    | <ol> <li>Brand advertising, including open screen and top banner ads.</li> <li>Performance-based advertising, including top banner and content feeds.</li> </ol>  |
|                      | Sales of digital albums | Sales of music albums and singles, which include a broad range of languages, genres and themes.   |
|                      | Sublicensing            | Sublicense certain licensed music content to other parties  |
| Social entertainment | Live streaming services | Sales of virtual items. Users purchase virtual items to gift to live streaming performers as a way for them to show support and appreciation for their performance.   |
| and others           | Other services          | Movie soundtrack production and ticketing services for offline music events   |

Source: Company data, CMBIGM

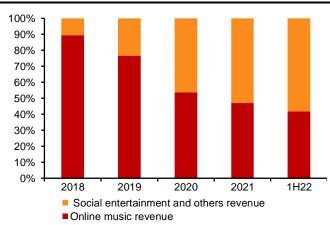
In 1H22, total revenue was up by 33.8% YoY to RMB4.3bn, mainly driven by the robust growth of social entertainment revenue and membership subscription revenue. Driven by strong growth in the number of paying users (+148.9% YoY), social entertainment revenue was up 56.7% YoY in 1H22, with its revenue contribution reaching 58.1% in 1H22 (1H21: 49.6%). Online music services revenue was up 11.2% YoY to RMB1.8bn in 1H22 and accounted for 41.9% of total revenue (1H21: 50.4%).

Figure 4: Cloud Music: total revenue trend



Source: Company data, CMBIGM

Figure 5: Cloud Music: revenue mix





## Solid music subscription business

Average online music MAU reached 182mn in 1H22, largely stable compared to average MAU in 2021. However, the paying ratio expanded 6.5pp YoY to 20.7% in 1H22, mainly attributable to Cloud Music's improving music content ecosystem and the effective promotion campaigns. Online music services revenue grew by 11.2% YoY to RMB1.8bn in 1H22, driven by the robust growth of membership subscription revenue (+37.6% YoY) but partly offset by decline in non-subscription revenue (-40.9% YoY). The decline in non-subscription revenue was primarily due to the soft advertising demand and the more stringent regulatory requirements on digital album sales.

Figure 6: Cloud Music: online music MAU

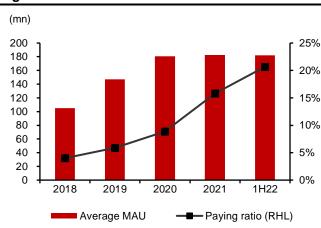
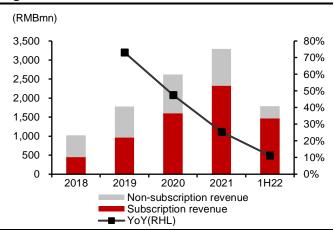


Figure 7: Cloud Music: online music revenue



Source: Company data, CMBIGM

Source: Company data, CMBIGM

Cloud Music has been actively expanding its music content library, especially after the music copyright exclusivity in China was ended by the regulator and each online music platform can directly negotiate copyright cooperation with the music labels. Cloud Music reached cooperation with a number of top-tier music labels over 2020-2022, further enriching its content library. The negotiations with two key music labels, JVR Music (which owns copyrights of Jay Chou's music) and Bin-music (which owns copyrights of Mayday's music), remained on progress but are likely to be completed in 2023E.

Figure 8: Cloud Music: progress of music licensing contract renegotiation

| Music labels               | Date   | Cooperation area  |
|----------------------------|--------|---|
| Completed                  |        |   |
| Rock Records               | Mar-20 | Music copyright, original music, music performance, online karaoke                  |
| Show City Times            | May-20 | Music copyright, music performance, online karaoke                                  |
| Warner Chappell Music      | May-20 | Music copyright, online karaoke   |
| Indie Works                | Jun-20 | Music copyright, original program, music festival, live house, music live streaming |
| CUBE Entertainment         | Jun-20 | Music copyright   |
| BPMT                       | Jun-20 | Music copyright   |
| Universal Music            | Aug-20 | Music copyright   |
| BMG                        | Sep-20 | Music copyright, music performance, online karaoke                                  |
| Sony Music                 | May-21 | Music copyright, streaming services, online karaoke, music Mlog                     |
| Modern Sky                 | Sep-21 | Music copyright   |
| Emperor Entertainment      | Nov-21 | Music copyright   |
| Yuehua Entertainment       | Dec-21 | Music copyright   |
| Linfair Records            | Apr-22 | Music copyright   |
| S.M. Entertainment         | Jun-22 | Music copyright   |
| Time Fengjun Entertainment | Jul-22 | Music copyright   |
| YG Entertainment           | Jul-22 | Music copyright   |
| On progress                |        |   |
|                            |        |   |



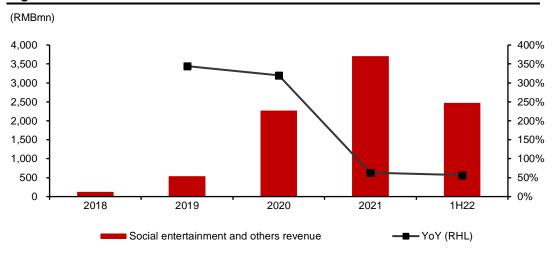
| JVR Music | 2023E | Music copyright |
|-----------|-------|-----------------|
| Bin-music | 2023E | Music copyright |

Source: Company data, CMBIGM estimates

## Social entertainment: remains at early development stage

Cloud Music's social entertainment business is still at an early development stage and has ample growth potential. Total number of social-entertainment paying users only account for 0.7% of Cloud Music's average MAUs in 2Q22. Social entertainment revenue increased by 56.7% YoY to RMB2.5bn in 1H22, driven by 149% YoY growth in the number of paying users.

Figure 9: Cloud music: social entertainment revenue





## China online music sector undergoing secular shift

## Driving balanced growth of paying users and ARPPU

China's online music services market has ample growth opportunities on both premium subscription and advertising businesses. According to iResearch, total online music market size will deliver a CAGR of 17.6% over 2021-2025E and reach RMB33bn in 2025E, mainly driven by rising paying ratio, climbing ARPPU as well as innovations in advertising solutions.

Premium membership business remains as the key growth driver of China's online music market. With rising paying ratio from 13.8% in 2021 to 24.1% in 2025E, we estimate China's music subscription revenue will grow at a CAGR of 19.0% over 2021-2025E and account for 61.0% of China music services revenue in 2025E (2021: 58.2%).

Figure 10: China: online music services market

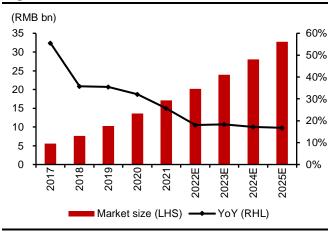
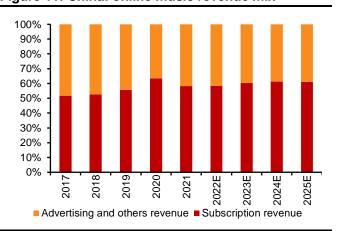


Figure 11: China: online music revenue mix

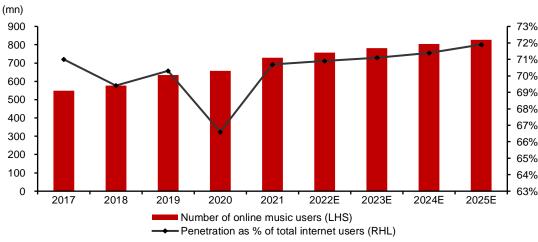


Source: iResearch, CMBIGM

Source: iResearch, CMBIGM

The overall user growth of China's online music sector has already entered a steady stage due to its high penetration rate. According to CNNIC, total number of online music users was up 10.8% YoY to 729mn in 2021, accounting for 70.7% of total internet users in China. Looking ahead, the total number of online music users is expected to grow at a CAGR of 3.2% over 2021-2025E, reaching 827mn in 2024E, based on iResearch estimate.

Figure 12: China: number of online music users



Source: CNNIC. iResearch. CMBIGM



Given the stagnant growth of overall user base, the increasing paying ratio of China's online music services is the cornerstone for China's online music sector growth. The overall membership paying ratio of China's online music sector remained relatively low at 13.8% in 2021, compared to both established markets (Europe/North America: 53.7/55.9% based on Spotify's data) and emerging markets (Latin America/rest of world: 42.2/22.2% based on Spotify's data).

We highlight several factors that could drive growth in the paying ratio going forward: 1) online music platforms have adopted the pay-for-streaming business model and have been putting more music behind the paywall (i.e., only available to paying users) since 2019. c.20/10% of TME/Cloud Music's songs are already behind the paywall, and we expect the proportion to further increase in the future; and the 2) better protection of music copyright in China. The National Copyright Administration launched the Jianwang Initiative (剑网行动) in each year since 2005, which focused on strengthening the copyright protection in online music, online video and online literature areas. With the collective efforts from regulators and music labels, the copyright protection in China's music sectors has been significantly improved.

Figure 13: Global music streaming: paying ratio comparison (2021)

55.9% 60% 53.7% 50% 42.2% 40% 30% 22.2% 20% 13.8% 10% 0% North China Rest of Latin Europe World America

Source: Company data, CMBIGM
Note: paying ratio in non-China area is based on Spotify's paying

ratio in different areas

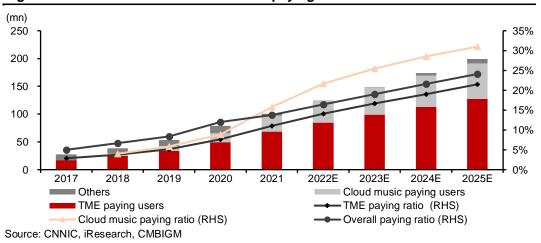
Figure 14: Music streaming adoption in different countries



Source: Spotify, CMBIGM

Based on iResearch data and our estimate, China's online music paying ratio will increase from 13.8% in 2021 to 24.1% in 2025E. Supported by rising paying ratio, total number of music subscribers will reach 199.3mn in 2025E, which implies a 2021-2025E CAGR of 18.6%.

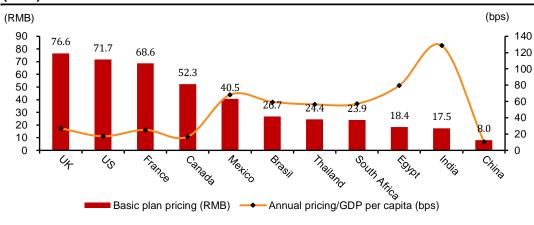
Figure 15: China online music: number of paying users





On the ARPPU front, both monthly ARPPU of TME/Cloud Music were low at RMB8.9/6.7 in 2021 and still had ample improvement potential, versus Spotify's ARPPU of RMB29.2. TME/Cloud Music's basic subscription package is priced at RMB8.0 per month, the lowest among all prices set by Spotify in major countries including emerging markets like India/Egypt/South Africa (RMB17.5/18.4/23.9). TME and Cloud Music have ample room to raise prices and offer more premium products, given its music subscription services remain affordable to most users. China's annualized basic music subscription plan price divided by GDP per capita was the lowest at 10.7bps in 2021, compared to other major countries.

Figure 16: Global music streaming: basic subscription plan pricing comparison (2021)



Source: Company data, CMBIGM Note: price in China is based on the basic plan price of QQ Music/Cloud Music; prices in other areas is based on individual plan prices of Spotify in other countries

As the paying user base reaches critical mass, online music platforms will focus more on the balanced growth of ARPPU and paying users. We expect online music platforms to launch several initiatives to drive their ARPPU: 1) offering more superior membership products that have more privileges and are set at a higher price. Revenue mix shift to higher-price products shall gradually drive ARPPU. For example, TME launched the Super VIP product priced at RMB30 per month in 2021; 2) gradually reducing discount offered to users; and 3) raising prices directly.

Figure 17: Cloud Music/TME/Spotify: membership subscription plan

| Type                       | Monthly pricing | Privileges  | Discount  |
|----------------------------|-----------------|---|---|
| Cloud Music                |                 | -   |   |
| Basic subscription package | RMB8            | Free download;<br>Access to premium content;<br>Better sound quality;   | -   |
| Vinyl VIP memberships      | RMB18           | Ad free; Ticketing privilege; Personalized interface VIP radio; Live streaming privilege (in addition to the basic package's privileges)  | 16% discount for automatic renewal RMB3 for the first month |
| TME                        |                 |   |   |
| Basic subscription package | RMB8            | Free download;<br>Access to pay-for-streaming content;<br>Better sound quality  | -   |
| Premium memberships        | RMB18           | Personalized app themes;<br>More sound effects;<br>Faster streaming and download speed<br>(in addition to the basic package's privileges) | 16% discount for automatic renewal RMB1 for the first month |

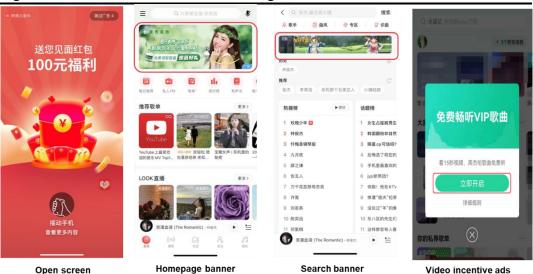


Source: Company data, CMBIGM

## Capture advertising monetization opportunities

Advertising will also be a key monetization opportunity for online music platforms in our view, as 1) the overall economic environment recovers; 2) the sector gradually digests the impact of regulations on splash screen ads; 3) platforms continue to innovate their advertising solutions. Cloud Music and TME have developed a comprehensive set of advertising solutions, including splash screen ads, banner ads and video incentive ads.

Figure 18: Online music sector: advertising solutions



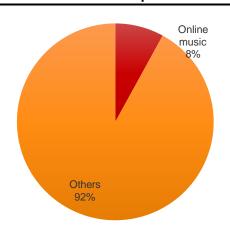
Source: Company data, CMBIGM

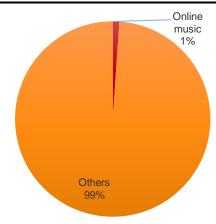
Ad monetization in China's online music sector remains untapped. According to CNNIC and QuestMobile, online music platforms account for c.8% of total time spend on China's, but they only take c.1% of China's online ad market share in 2021. We expect online music platforms to expand their ad market share, as they innovate advertising solutions and enhance ROI.



Figure 19: China Internet: time spend share

Figure 20: China Internet: online ad market share



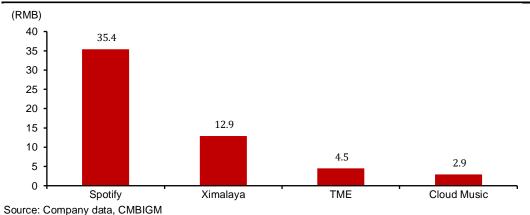


Source: CNNIC, CMBIGM

Source: QuestMobile, iResearch, CMBIGM

Cloud Music and TME's ad revenue per ad-supported MAU were RMB2.9 and RMB4.5 in 2021, lower than those of Ximalaya (RMB12.9) and Spotify (RMB35.4). Both platforms actively launched new advertising products to expand their ad monetization potential. In 1H22, TME launched the freemium model, which has already been proven successful by Spotify in many countries. Under the freemium model, free users can access paid content via watching video ads. The model allows platforms to better monetize even if the users are not converted to subscribers.

Figure 21: Global music streaming: ad revenue per ad-supported MAU (2021)



#### Gross margin improvement on the horizon

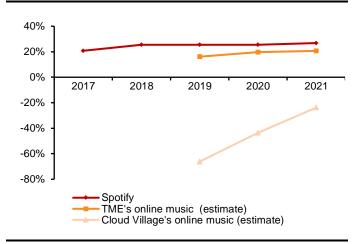
Based on our estimate, online music GPM of TME/Cloud Music still has considerable room to improve, versus Spotify's GPM of 29.2% in 2021 and Spotify's long-term GPM target of 30-35%. The main drivers for their online music business GPM are:

1) Regulatory measures: The State Administration for Market Regulation's (SAMR) issued administrative decision on banning music copyright exclusivity in 2021, which prompt the rationalization of music licensing costs in China and encourage more sustainable business models of China's online music platforms. After the issue of the decision, both Cloud Music and TME saw more rational competitive environment and lower minimum royalty payments required by the music labels. Online music platforms' renegotiation with music labels remained under progress, and we expect the GPM improvement will gradually manifest itself going forward.



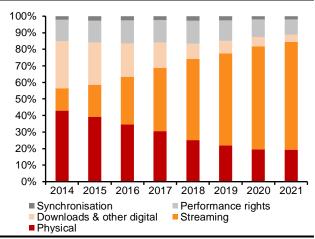
- **2)** Economies of scale: Music licensing agreement typically requires a fixed minimum royalty payment and a variable payment based on membership subscription revenue/music streams. If the online music platforms generate sufficient music subscription revenue to cover the fixed minimum royalty payment, they could see significant economies of scale and improvement in gross margin.
- **3) Rising bargaining power of music streaming platforms:** The bargaining power of online music platforms has been increasing over the past few years, since streaming music's revenue contribution to global music industry rose from 13.6% in 2014 to 65.3% in 2021 according to IFPI. As online music platforms play a more important role in creation/promotion/monetization of music content, we expect online music platforms to have more leverage against music labels when negotiating licensing agreement.

Figure 22: Online music platforms: GPM comparison



Source: Company data, CMBIGM

Figure 23: Global music industry: revenue mix



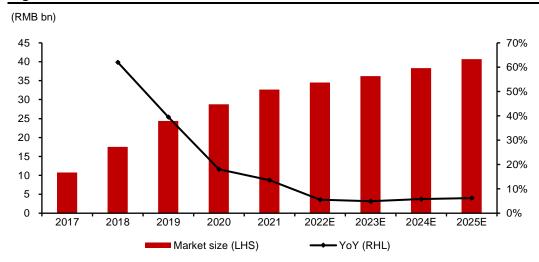
Source: IFPI, CMBIGM



## China social entertainment: entering steady growth stage

Music-centric social entertainment services were mainly offered in the form of online karaoke, audio and video live streaming. As the regulations continue to strengthen in China's live streaming sector, the music-centric social entertainment services market has entered a new phase, with more sustainable business model but slower growth. Based on iResearch data, China's music-centric social entertainment services market size will grow at a CAGR of 5.6% over 2021-2025E and reach RMB40.7bn in 2025E.

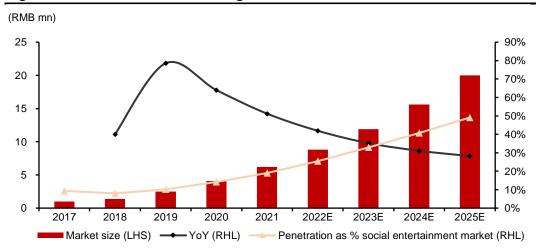
Figure 24: China music-centric social entertainment services: market size



Source: iResearch, CMBIGM

Despite the slowdown in growth of the overall social entertainment sector, we expect the audio live streaming services to maintain strong growth going forward, mainly driven by the increasing penetration of audio live streaming services. Based on CIC data and our estimate, China's online audio live streaming services revenue will grow at a CAGR of 34% over 2021-2025E and reach RMB20bn in 2025E, accounting for 49% of China's music-centric social entertainment services revenue. The audio users tend to show stronger user stickiness, compared to users of other entertainment content. According to CIC, average daily time spent on online audio was 131.2 minutes in 2021, higher than that of short video/long video (87.2/71.9 minutes).

Figure 25: China audio live streaming services: market size



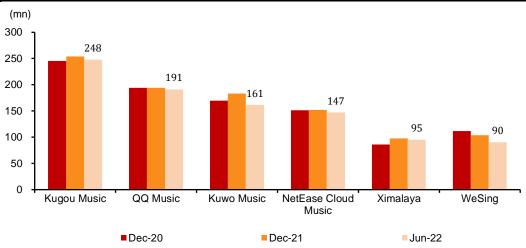
Source: CIC, iResearch, CMBIGM estimates



## Two leaders established strong leadership

Cloud Music and TME have established strong leadership in the China's online music sector. Two companies together operated the top four online music apps in terms of MAUs, including Tencent's Kugou Music/QQ Music/Kuwo Music with MAUs of 248/191/161mn and Cloud Music's NetEase Cloud Music with MAUs of 147mn, in June 2022. User base of TME and Cloud Music was significantly higher than other players.

Figure 26: China online music & audio platforms: MAUs

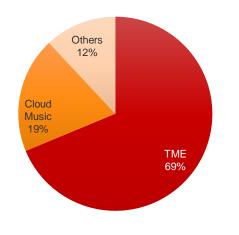


Source: QuestMobile, CMBIGM

According to iResearch and our estimate, TME and Cloud Music each represented 67% and 19% of China's online music market revenue in 2021. TME's market share dropped by c.2pp YoY in 2021, as the stringent regulatory environment led to the drop in non-core sublicensing and digital album sales revenue. Cloud Music maintained its market share in 2021, mainly driven by the solid growth of its music subscription business.

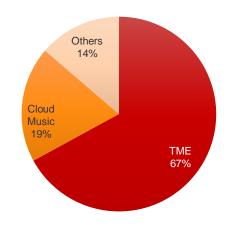
We expect TME and Cloud Music to continue to take the lion's share of China's online music market, given their unparalleled user traffic and content advantages. New entrants like ByteDance's Qishui Music are unlikely to disrupt the business model and competitive landscape of online music sector, as the membership subscription has already been proven the most effective monetization methods for both online music platforms and music labels.

Figure 27: China's online music mkt share (2020)



Source: iResearch, CMBIGM estimates

Figure 28: China's online music mkt share (2021)



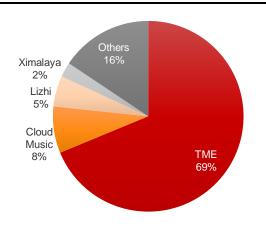
Source: iResearch, CMBIGM estimates

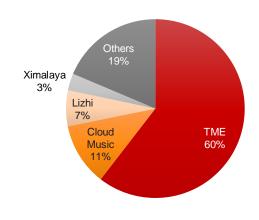


In terms of music-centric social entertainment market, Cloud Music's market share rose from 8% in 2020 to 11% in 2021, mainly driven by its resilient audio live streaming business amid regulatory challenges and intensive competitions. TME's social entertainment business faced challenges in 2021, with market share down by 9pp YoY to 60%. Its social entertainment user base declined by 15% YoY in 2021, due to the increasing competition from other entertainment formats.

Figure 29: Social entertainment market share (2020)

Figure 30: Social entertainment mkt share (2021)





Source: iResearch, Company data, CMBIGM

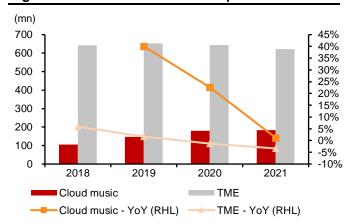
Source: iResearch, Company data, CMBIGM

## **Comparison of Cloud Music and TME**

#### User base and content library

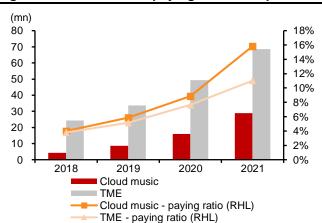
On the user front, both TME and Cloud Music's MAU growth became stagnant in 2021, with high penetration rate. Cloud Music's average online music MAUs was up 1.2% YoY to 182.6mn in 2021, still having a wide gap compared to TME's MAU of 622mn. Cloud Music's paying ratio was higher at 15.8% in 2021, versus TME's paying ratio of 11.0%, mainly due to Cloud Music's more aggressive membership promotion in 2021 in our view. This is reflected by Cloud Music's lower monthly APPRU of RMB6.7 in 2021 (vs. TME: RMB8.9). Looking forward, we expect Cloud Music's paying ratio to expand at a slower pace, as it focuses more on the balanced growth of paying ration and ARPPU.

Figure 31: Online music MAU comparison



Source: Company data, CMBIGM

Figure 32: Online music paying users comparison





Cloud Music and TME have developed comprehensive music content library, while Cloud Music may have a stronger ecosystem of independent musicians. As of the end of December 2021, total music tracks of TME/Cloud Music surpassed 90/80mn; the number of independent musicians on Cloud Music/TME exceeded 400k/300k respectively.

Figure 33: Total music tracks (2021)

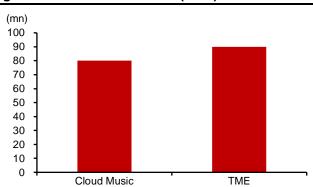
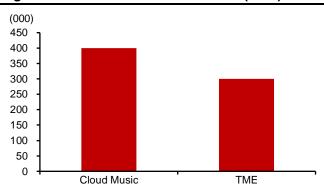


Figure 34: Number of indie musicians (2021)



Source: Company data, CMBIGM

Source: Company data, CMBIGM

#### ■ Revenue growth & GPM

Cloud Music's total revenue remains on the rapid growth track driven by robust growth of music subscription and social entertainment revenue, while TME's total revenue growth is relatively moderate as non-sub music and social entertainment businesses face regulatory and competitive pressure. TME's social entertainment business was more mature and contributes a greater percentage of its total revenue. In 2021, social entertainment business contributed 63.3/53.0% of TME/Cloud Music's total revenue.

Figure 35: Total revenue growth comparison

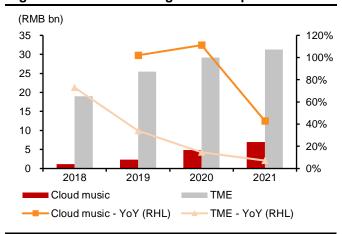
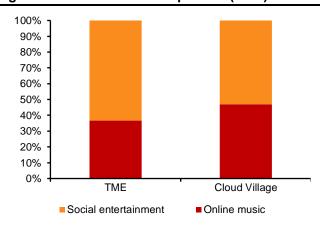


Figure 36: Revenue mix comparison (2021)



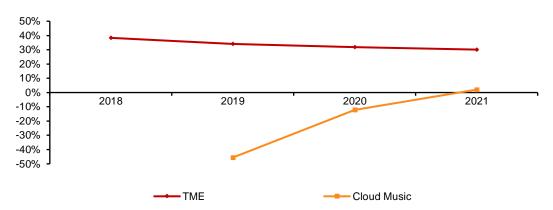
Source: Company data, CMBIGM

Source: Company data, CMBIGM

Due to the greater revenue contribution from the higher-margin social entertainment business, TME's overall GPM profile was better than Cloud Music's. That said, Cloud Music's overall GPM improved from -45.6% to +2.0% and narrowed the gap against TME's GPM over 2019-2021, mainly due to 1) the increase in social entertainment revenue contribution from 23.4% in 2019 to 53.0% in 2021; and 2) rationalization of music licensing costs.



Figure 37: Gross margin: Cloud Music vs TME

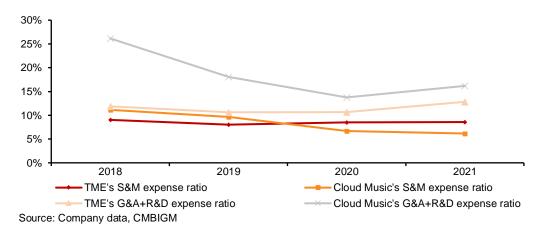


Source: Company data, CMBIGM

#### Operating efficiency and net margin

Cloud Music saw solid operating leverage on G&A and R&D expenses over 2018-2021, and we expect it has further room to improve compared to TME's. Cloud Music's combined G&A and R&D expenses as % of total revenue dropped from 26.2% in 2018 to 16.2% in 2021, which is still higher than that of TME (12.8%). Cloud Music was more prudent on marketing spending, as it focuses on organic growth of user traffic driven by quality content. Cloud Music's S&M expenses ratio declined from 11.1% in 2018 to 6.2% in 2021, lower than TME's (8.6%).

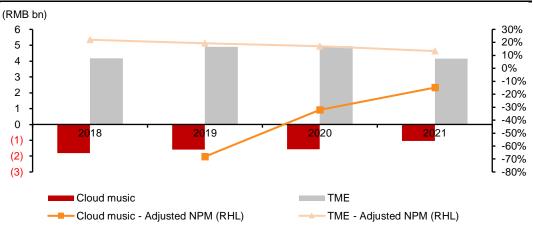
Figure 38: Operating expenses as % of total revenue: Cloud Music vs TME



Cloud Music is yet to break even due to its relatively low GPM, which is dragged down by the massive investment in music content. Supported by its expanding GPM and operating leverage, Cloud Music's adjusted net loss margin narrowed from -68.2% in 2019 to -14.9% in 2021. Its adjusted net margin still has considerable improvement potential, versus TME's adjusted net margin of 13.3% in 2021.



## Figure 39: Adjusted net profit: Cloud Music vs TME

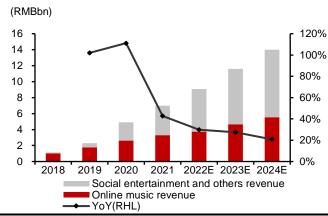




## **Financial forecast**

We forecast total revenue to increase by 29.9/27.5/20.8% YoY to RMB9.1/11.6/14.0bn in 2022/2023/2024E, primarily driven by the solid growth of the music subscription and social entertainment businesses. Online music/social entertainment business will deliver a revenue CAGR of 19.0/31.7% over 2021-2024E, as their paying user base ramped up at a CAGR of 25.3/46.2% during the same period, based on our estimates. Online music/social entertainment businesses will account for 39.6/60.4% of total revenue in 2024E, versus 47.0/53.0% of total revenue in 2021.

Figure 40: Cloud Music: total revenue trend



Source: Company data, CMBIGM estimates

100% 90% 80% 70% 60% 50%

Figure 41: Cloud Music: revenue mix

40% 30% 20% 10% 0% 2020 2021 2019 2022F 2023F Social entertainment and others revenue Online music revenue

Source: Company data, CMBIGM estimates

We expect significant margin improvement potential for Cloud Music going forward. Driven by favourable revenue mix shift to higher-margin social entertainment business and rationalizing content costs, we estimate overall GPM to rise from 2.0% in 2021 to 12.9/17.0/20.0% in 2022/2023/2024E. The expanding GPM in addition to operating efficiency improvement shall drive adjusted net margin to improve from -14.9% in 2021 to -3.8% in 2022E and 0.6/3.8% in 2023/2024E. We forecast adjusted net income of RMB75/535mn in 2023/2024E, versus adjusted net loss of RMB346mn in 2022E.

Figure 42: Cloud Music: adjusted net loss trend

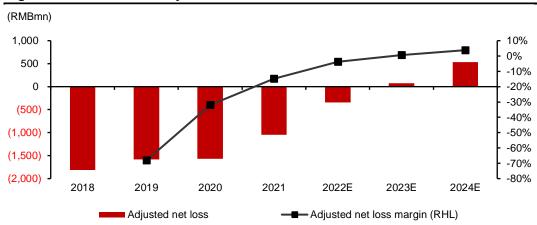




Figure 43: Cloud Music: financial summary

| (RMB mn)                               | 2020   | 2021   | 2022E  | 2023E  | 2024E  |
|--|--------|--------|--------|--------|--------|
| Online music segment                   |        |        |        |        |        |
| Online music MAUs (mn)                 | 180.5  | 182.6  | 182.6  | 191.7  | 199.4  |
| YoY                                    | 22.6%  | 1.2%   | 0.0%   | 5.0%   | 4.0%   |
| Online music paying users (mn)         | 16.0   | 28.9   | 39.6   | 48.9   | 56.8   |
| YoY                                    | 85.0%  | 81.1%  | 37.1%  | 23.4%  | 16.2%  |
| Paying ratio                           | 8.8%   | 15.8%  | 21.7%  | 25.5%  | 28.5%  |
| Online music revenue                   | 2,623  | 3,290  | 3,737  | 4,669  | 5,542  |
| YoY                                    | 47.6%  | 25.4%  | 13.6%  | 24.9%  | 18.7%  |
| Subscription revenue                   | 1,604  | 2,324  | 3,090  | 3,965  | 4,794  |
| YoY                                    | 66.1%  | 44.9%  | 33.0%  | 28.3%  | 20.9%  |
| Non-subscription revenue               | 1,019  | 966    | 647    | 704    | 749    |
| YoY                                    | 25.6%  | -5.1%  | -33.1% | 8.8%   | 6.3%   |
| Social entertainment segment           |        |        |        |        |        |
| Social entertainment paying users (mn) | 0.3    | 0.7    | 1.4    | 1.7    | 2.1    |
| YoY                                    | 256.7% | 108.9% | 97.8%  | 29.3%  | 22.2%  |
| Social entertainment revenue           | 2,273  | 3,708  | 5,354  | 6,926  | 8,464  |
| YoY                                    | 319.8% | 63.1%  | 44.4%  | 29.3%  | 22.2%  |
| Overall                                |        |        |        |        |        |
| Total revenue                          | 4,896  | 6,998  | 9,092  | 11,595 | 14,006 |
| YoY                                    | 111.2% | 42.9%  | 29.9%  | 27.5%  | 20.8%  |
| Gross profit margin                    | -12.2% | 2.0%   | 12.9%  | 17.0%  | 20.0%  |
| S&M expense ratio                      | 6.7%   | 6.2%   | 6.9%   | 7.0%   | 6.7%   |
| R&D expense ratio                      | 11.8%  | 12.4%  | 11.0%  | 9.9%   | 9.4%   |
| Adjusted net profit margin             | -32.0% | -14.9% | -3.8%  | 0.6%   | 3.8%   |
| Adjusted net profit                    | -1,568 | -1,044 | -346   | 75     | 535    |

Source: Company data, CMBIGM estimates

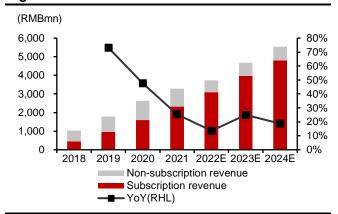
### Online music (41.1% of 2022E total revenue)

We forecast online music services revenue to grow by 13.6% YoY to RMB3.7bn in 2022E, mainly driven by growth in subscription revenue (+33.0% YoY) but partly offset by decline in non-subscription revenue (-33.1% YoY). Non-subscription revenue, mainly advertising revenue, declined in 2022E due to the soft advertising demand amid macro uncertainty and the more stringent regulations on splash screen ad. Nonetheless, we expect online music services revenue growth will reaccelerate to 24.9/18.7% YoY in 2023/2024E, as the non-subscription business digests the macro and regulatory impact.

Cloud Music will continue to focus on driving paying user growth, supported by its enriching content library and active user acquisition strategy. We forecast the number of paying users will increase by 37.1/23.4/16.2% YoY to 39.6/48.9/56.8mn in 2022/2023/2024E, with paying ratio rising from 15.8% in 2021 to 21.7/25.5/28.5% in 2022/2023/2024E.

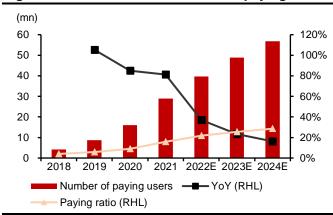


Figure 44: Cloud Music: online music revenue



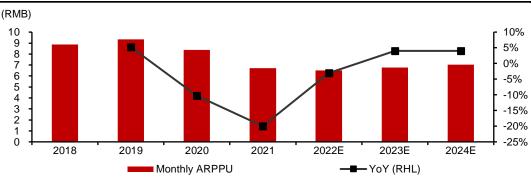
Source: Company data, CMBIGM estimates

Figure 45: Cloud Music: online music paying users



Source: Company data, CMBIGM estimates

Figure 46: Cloud Music: online music monthly ARPPU

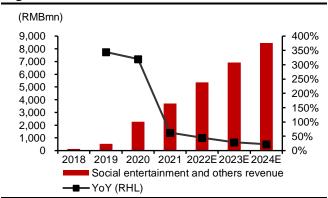


Source: Company data, CMBIGM estimates

## Social entertainment (58.9% of 2022E total revenue)

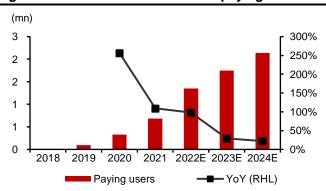
Cloud Music's social entertainment business remains at early stage of development, with its paying users only accounting for 0.4% of its average MAUs and 6.5% of TME's social entertainment paying users in 2021. As Cloud Music continues to innovate on its social features and enrich its live streaming content ecosystem, we estimate the number of social entertainment paying users will increase by 97.8/29.3/22.2% to 1.4/1.7/2.1mn in 2022/2023/2024E. This will drive social entertainment revenue to grow 44.4/29.3/22.2% YoY to RMB5.4/6.9/8.5bn in 2022/2023/2024E, equivalent to 58.9/59.7/60.4% of total revenue.

Figure 47: Cloud Music: social ent. revenue



Source: Company data, CMBIGM estimates

Figure 48: Cloud Music: social ent. paying users



Source: Company data, CMBIGM estimates

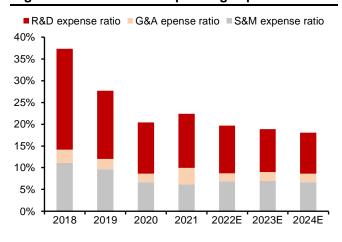


## Operating efficiency and margin analysis

As the era of music copyright exclusivity was ended by the regulator in 2021, the competition and costs for music copyright have been rationalizing, boosting Cloud Music's GPM outlook. Besides, the revenue mix shift to higher-margin social entertainment business will also support Cloud Music GPM. As a result, we forecast overall GPM to expand from 2.0% in 2021 to 12.9/17.0/20.0% in 2022/2023/2024E.

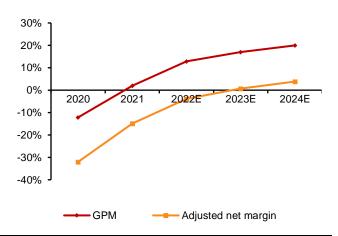
Cloud Music experienced strong operating leverage over 2018-2021, with its operating expenses to total revenue ratio down from 37.3% in 2018 to 22.4% in 2021. Compared to TME (see Fig.38), we expect Cloud Music will still have potential for improving its operating efficiency on S&M and R&D. We forecast total expenses ratio to decline from 22.4% in 2021 to 19.7/18.9/18.1% in 2022/2023/2024E. Overall, we forecast adjusted net margin of +0.6/3.8% in 2023/2024E, up from -3.8% in 2022E, mainly driven by the GPM expansion and the operating leverage on S&M & R&D expense.

Figure 49: Cloud Music: operating expense ratio



Source: Company data, CMBIGM estimates

Figure 50: Cloud Music: margin trend



Source: Company data, CMBIGM estimates



## **Valuation**

Based on DCF valuation (WACC of 14.7% and terminal growth of 2.5%), our target price of Cloud Music is HK\$110.0, which implies 2.2x/1.8x 2022/2023E PS. We are positive on the long-term growth of Cloud Music's free cash flow, driven by the rising paying ratio, expanding gross margin profile and improving operating efficiency.

Figure 51: Cloud Music: DCF valuation

| (RMB mn)                      | 2022E    | 2023E | 2024E | 2025E | 2026E | 2027E | 2028E | 2029E |
|-------------------------------|----------|-------|-------|-------|-------|-------|-------|-------|
| djusted EBITDA                | (479)    | (69)  | 428   | 925   | 1,380 | 1,896 | 2,361 | 2,871 |
| ee cash flow                  | (383)    | 289   | 583   | 989   | 1,347 | 1,763 | 2,166 | 2,594 |
| PV of FCF                     | 5,610    |       |       |       |       |       |       |       |
| scounted terminal value       | 8,627    |       |       |       |       |       |       |       |
| terprise value                | 14,237   |       |       |       |       |       |       |       |
| et cash                       | 6,141    |       |       |       |       |       |       |       |
| quity value                   | 20,378   |       |       |       |       |       |       |       |
| umber of shares (diluted, mn) | 208      |       |       |       |       |       |       |       |
| change rate (HKD/RMB)         | 0.89     |       |       |       |       |       |       |       |
| aluation per share (HK\$)     | 110.0    |       |       |       |       |       |       |       |
|                               |          |       |       |       |       |       |       |       |
| sk free rate                  | 2.8%     |       |       |       |       |       |       |       |
| ta                            | 121.0%   |       |       |       |       |       |       |       |
| uity risk premium             | 9.8%     |       |       |       |       |       |       |       |
| ost of equity                 | 14.7%    |       |       |       |       |       |       |       |
| ost of debt                   | 5.0%     |       |       |       |       |       |       |       |
| x rate                        | 15.0%    |       |       |       |       |       |       |       |
| bt/capital                    | Net Cash |       |       |       |       |       |       |       |
| ACC                           | 14.7%    |       |       |       |       |       |       |       |
| rminal FCF growth (%)         | 2.5%     |       |       |       |       |       |       |       |

Source: CMBIGM estimates

Cloud Music currently trades at 1.1x 2023E PS, which is at a discount to that of TME (1.3x 2023E PS). Its current valuation offers an attractive risk-reward in our view, given Cloud Music's strong revenue CAGR and margin improvement potential over 2021-2024E.

Figure 52: Cloud Music: peer valuation comparison

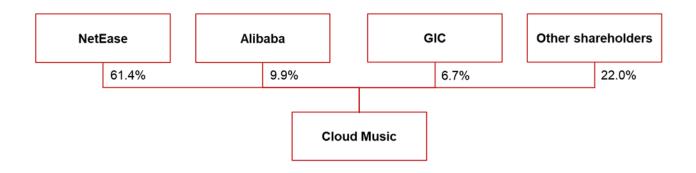
| Companies | Ticker  | Price   | Revenue growth (YoY%) |       | PS(x) |       |       | 2Q22 MAU | Market Cap/MAU |        |
|-----------|---------|---------|-----------------------|-------|-------|-------|-------|----------|----------------|--------|
|           |         | (Local) | 2022E                 | 2023E | 2024E | 2022E | 2023E | 2024E    | (mn)           | (US\$) |
| TME       | TME US  | 3.8     | (19.1)                | 6.3   | 4.8   | 1.4   | 1.3   | 1.2      | 593            | 11.1   |
| Spotify   | SPOT US | 88.7    | 8.4                   | 15.8  | 14.5  | 1.3   | 1.1   | 1.0      | 433            | 39.4   |
| Bilibili  | BILI US | 11.1    | 3.4                   | 27.6  | 27.6  | 1.1   | 0.8   | 0.6      | 306            | 14.5   |
| Kuaishou  | 1024 HK | 40.0    | 7.5                   | 42.5  | 17.8  | 1.3   | 1.2   | 0.9      | 587            | 37.3   |
| Average   |         |         |                       |       |       | 1.3   | 1.1   | 0.9      |                | 25.6   |

Source: Bloomberg, CMBIGM Note: data are as of 21 Oct 2022



## **Appendix**

Figure 53: Cloud Music: shareholding structure (June 2022)



Source: Company data, CMBIGM

Figure 54: Management and director profile

| Name         | Age | Position                              | Prior experience  |
|--------------|-----|---------------------------------------|---|
| Lei Ding     | 51  | CEO, chairman of the board            | Founded NetEase and has served as its chief executive officer since November 2005. He has also served as a director of Youdao since January 2015. He received a bachelor of science degree from the University of Electronic Science and Technology of China.   |
| Yong Li      | 44  | Executive Director,<br>Vice President | Previously served as a vice president of Kaola. Before joining Cloud Village, he was a senior technical expert at Tencent. He also served as a vice president at Vipshop from April 2015 to June 2018, and as a general manager at Hillhouse Capital in 2018.   |
| Yanfeng Wang | 35  | Executive Director                    | Has been responsible for brand communication at NetEase since 2015. Before then, she was a senior editor and columnist at NetEase Media between May 2013 and March 2015, and a senior editor at Phoenix New Media Limited from June 2011 to May 2013.   |
| Yiwen Zhu    | 42  | Senior Vice<br>President              | Previously held a number of positions at NetEase from September 2006 to July 2012, including technical engineer, technical director, and product director. Before joining NetEase, he served as a software engineer at IBM China in 2006.   |
| Ju Lu        | 42  | Vice President of<br>Finance          | Previously, she served as the chief financial officer at UNIS-WDC Storage Co., Ltd. from May 2016 to February 2018. She was the finance controller at StormNet Information Technology (Shanghai) Co., Ltd. from March 2011 to March 2016. Ms. Lu also worked at Ernst & Young Hua Ming LLP from September 2002 to December 2010 and left as a senior manager. |



## **Financial Summary**

| INCOME STATEMENT                                   | 2019A            | 2020A   | 2021A             | 2022E             | 2023E             | 2024E             |
|--|------------------|---------|-------------------|-------------------|-------------------|-------------------|
| YE 31 Dec (RMB mn)                                 |                  |         |                   |                   |                   |                   |
| Revenue  | 2,318            | 4,896   | 6,998             | 9,092             | 11,595            | 14,006            |
| Cost of goods sold                                 | 3,375            | 5,491   | 6,855             | 7,921             | 9,624             | 11,209            |
| Gross profit                                       | (1,057)          | (595)   | 143               | 1,171             | 1,971             | 2,797             |
| Operating expenses                                 | 583              | 929     | 1,490             | 1,698             | 2,083             | 2,410             |
| Selling expense                                    | 223              | 327     | 431               | 627               | 812               | 931               |
| Admin expense                                      | 55               | 97      | 264               | 164               | 232               | 280               |
| R&D expense  | 363              | 576     | 869               | 1,000             | 1,148             | 1,317             |
| Others   | (59)             | (71)    | (75)              | (93)              | (108)             | (119)             |
| Operating profit                                   | (1,639)          | (1,525) | (1,347)           | (527)             | (112)             | 388               |
| Investment gain/loss                               | (1)              | (4)     | 2                 | 3                 | 4                 | 5                 |
| Other gains/(losses)                               | (423)            | (1,522) | (755)             | 0                 | 0                 | 0                 |
| Interest income                                    | 79               | 101     | 48                | 70                | 68                | 72                |
| Interest expense                                   | (29)             | 0       | 0                 | 0                 | 0                 | 0                 |
| Pre-tax profit                                     | (2,014)          | (2,950) | (2,051)           | (454)             | (41)              | 465               |
| Income tax   | (2)              | (2)     | (5)               | (1)               | (0)               | (70)              |
| After tax profit                                   | (2,016)          | (2,951) | (2,056)           | (455)             | (41)              | 395               |
| Net profit   | (2,016)          | (2,951) | (2,056)           | (455)             | (41)              | 395               |
| Adjusted net profit                                | (1,580)          | (1,568) | (1,044)           | (346)             | 75                | 535               |
| BALANCE SHEET                                      | 2019A            | 2020A   | 2021A             | 2022E             | 2023E             | 2024E             |
|  | ZUIJA            | LULUA   | ZUZTA             | ZUZZZ             | 20202             | ZUZTE             |
| YE 31 Dec (RMB mn)                                 | 0.050            | 0.000   | 0.700             | 0.700             | 0.000             | 40.044            |
| Current assets                                     | 8,256            | 6,863   | 8,769             | 8,722             | 9,382             | 10,341            |
| Cash & equivalents                                 | 911              | 3,006   | 853               | 337               | 489               | 934               |
| Account receivables                                | 374              | 254     | 674               | 744               | 806               | 828               |
| Prepayment<br>CT have deposite                     | 1,447            | 1,642   | 1,345             | 1,444             | 1,572             | 1,732             |
| ST bank deposits                                   | 5,167            | 817     | 5,528             | 5,804             | 6,094             | 6,399             |
| Financial assets at FVTPL                          | 339              | 971     | 241               | 265               | 291               | 320               |
| Other current assets                               | 18<br><b>781</b> | 172     | 128<br><b>619</b> | 128<br><b>642</b> | 128<br><b>651</b> | 128<br><b>648</b> |
| Non-current assets PP&E                            |                  | 1,195   | 44                |                   | 48                | 62                |
|  | 24<br>0          | 21<br>0 | 11                | 49                | 48                | 62<br>11          |
| Right-of-use assets                                | 74               | 89      | 93                | 11<br>93          | 93                | 93                |
| Investment in JVs & assos Other non-current assets | 683              | 1,085   | 471               | 490               | 500               | 483               |
| Total assets                                       | 9,037            | 8,057   | 9,388             | 9,364             | 10,033            | 10,990            |
| Total assets                                       | 9,037            | 6,037   | 9,300             | 9,364             | 10,033            | 10,990            |
| Current liabilities                                | 1,211            | 2,173   | 1,948             | 2,254             | 2,798             | 3,195             |
| Account payables                                   | 126              | 1       | 0                 | 0                 | 0                 | 0                 |
| Tax payable  | 1                | 1       | 0                 | 0                 | 0                 | 0                 |
| Other current liabilities                          | 239              | 146     | 56                | 56                | 56                | 56                |
| Lease liabilities                                  | 0                | 0       | 3                 | 3                 | 3                 | 3                 |
| Contract liabilities                               | 175              | 385     | 605               | 786               | 1,044             | 1,261             |
| Accrued expenses                                   | 670              | 1,640   | 1,284             | 1,409             | 1,695             | 1,875             |
| Non-current liabilities                            | 10,772           | 11,192  | 58                | 74                | 124               | 148               |
| Convertible bonds                                  | 10,764           | 11,162  | 0                 | 0                 | 0                 | 0                 |
| Other non-current liabilities                      | 8                | 29      | 58                | 74                | 124               | 148               |
| Total liabilities                                  | 11,983           | 13,364  | 2,006             | 2,328             | 2,922             | 3,343             |
| Share capital                                      | 0                | 0       | 0                 | 0                 | 0                 | 0                 |
| Retained earnings                                  | (5,423)          | (8,372) | (10,600)          | (11,055)          | (11,096)          | (10,701)          |
| Other reserves                                     | 2,478            | 3,066   | 17,982            | 18,091            | 18,207            | 18,347            |
| Total shareholders equity                          | (2,946)          | (5,307) | 7,382             | 7,036             | 7,111             | 7,646             |
| Total equity and liabilities                       | 9,037            | 8,057   | 9,388             | 9,364             | 10,033            | 10,990            |



| CASH FLOW   2019A   2020A   2021A   2022E   2023E   2024E   2024E | 0.000 TI 000                 | 20121      | 2222    | 20211    |        | A TOTAL OF THE STATE OF THE STA |        |
|---|------------------------------|------------|---------|----------|--------|--|--------|
| Operation or Portil before taxation         (2,014)         (2,059)         (2,051)         (454)         (21)         455         25   | CASH FLOW                    | 2019A      | 2020A   | 2021A    | 2022E  | 2023E  | 2024E  |
| Poof Infore taxation  | YE 31 Dec (RMB mn)           |            |         |          |        |  |        |
| Depreciation & amortization   | . •                          |            |         |          |        |  |        |
| Tax paid         (2)         (2)         (6)         (11)         (0)         (70)           Change in working capital         (86)         531         1,72         134         383         288           Others         381         1,429         957         399         436         88           Net cash from operations         (1,706)         (369)         (360)         (230)         436         740           Investing         Use pair as part of the proceeds from disposal of short-term (appeal of short (app  |                              | • • •      |         |          | , ,    | • •  |        |
| Change in working capital         (86)         531         177         134         333         258           Others         381         1,429         957         383         48         68           Net cash from operations         (1,706)         (369)         9989         9250         436         774           Investing         Capital expenditure         (15)         (21)         (40)         (38)         353         333         43         63         334         333         333         333         333         334         333         333         333         334         333         333         334         333         334         334         334         333         334         334         334         334         334         334         334         334         334         334         334         334         334         334         334         <  | •                            |            |         |          |        |  |        |
| Others         381         1,429         957         39         48         68           Net cash from operations         (3706)         (368)         (308)         (250)         436         740           Investing         Univesting           Capital expenditure         (15)         (21)         (40)         (36)         (35)         (33)           Acquisition of subsidiaries/ investments         (9,265)         (6,534)         (11,1544)         (3000)         (317)         (334)           Net proceeds from disposal of short-term         6,816         10,045         7,881         0  | •                            |            |         |          |        |  |        |
| Net cash from operations  |                              | ` '        |         |          |        |  |        |
| Capital expenditure   |                              |            |         |          |        |  |        |
| Capital expenditure         (15)         (21)         (40)         (36)         (35)         (33)           Acquisition of subsidiaries/ investments         (9,265)         (6,534)         (11,544)         (300)         (317)         (334)           Net proceeds from disposal of short-term investing         6,816         10,045         7,681         0   | Net cash from operations     | (1,706)    | (969)   | (908)    | (250)  | 436  | 740    |
| Acquisition of subsidiaries/ investments         (9,265)         (6,634)         (11,544)         (300)         (317)         (334)           Net proceeds from disposal of short-term investments         6,816         10,045         7,681         0         0         0           Others         (2,440)         3,406         (3,862)         (267)         (284)         (294)           Financing           Proceeds from share issues         7,324         0         2,679         0         0         0           Share repurchases         0         0         0         0         0         0         0           Others         (2,836)         (321)         (55)         0         0         0         0           Net cash from financing         4,48         (321)         2,614         0  | Investing                    |            |         |          |        |  |        |
| Net proceeds from disposal of short-term investments         6,816         10,045         7,681         0         0         0           Others         24         (85)         40         70         68         72           Net cash from investing         (2,440)         3,406         (3,862)         (267)         (284)         (294)           Financing         8         7,324         0         2,679         0 <td< td=""><td>Capital expenditure</td><td>(15)</td><td>(21)</td><td>(40)</td><td>` '</td><td>(35)</td><td>(33)</td></td<>   | Capital expenditure          | (15)       | (21)    | (40)     | ` '    | (35)   | (33)   |
| Investments   | ·                            | (9,265)    | (6,534) | (11,544) | (300)  | (317)  | (334)  |
| Others         24         (85)         40         70         68         72           Net cash from investing         (2,440)         3,406         (3,862)         (267)         (284)         72           Financing         Financing         Financing         7,324         0         2,679         0   |                              | 6,816      | 10,045  | 7,681    | 0      | 0  | 0      |
| Net cash from investing   (2,440)   (3,466)   (3,862)   (267)   (284)   (294)   |                              | 24         | (85)    | 40       | 70     | 68   | 72     |
| Financing           Proceeds from share issues         7,324         0         2,679         0         0         0           Share repurchases         0         0         0         0         0         0         0           Others         (2,336)         (321)         (565)         0         0         0           Net cash from financing         4,488         (321)         2,614         0         0         0           Net change in cash         551         911         3,006         853         337         489           Cash at the beginning of the year         518         2911         4         0         0         0           Exchange difference         18         (21)         4         0         0         0         0           GROWTH         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         8         111.2%         42.9%         29.9%         27.5%         20.8%           Adj. net profit         na   |                              |            | , ,     |          |        |  |        |
| Proceeds from share issues         7,324         0         2,679         0         0         0           Share repurchases         0         0         0         0         0         0         0           Others         (2,836)         (321)         (65)         0         0         0           Net cash from financing         4,488         (321)         2,614         0         0         0           Net change in cash         551         911         3,006         853         337         489         288         283         337         489         288         284         2021A         0   | -                            | (=, : : •) | 3,.55   | (0,002)  | (=0.)  | (== .,   | (=0.)  |
| Share repurchases         0         0         0         0         0         0         0         0           Net cash from financing         4,488         (321)         2,614         0         0         0           Net change in cash         Vertical filterence         151         911         3,006         853         337         489           Exchange difference         18         (21)         4         0         0         0         0           Cash at the beginning of the year         551         911         3,006         853         337         489         9.04           Exchange difference         18         (21)         4         0         0         0         0           Cash at the end of the year         911         3,006         853         337         489         9         9         9         9         9         24E         24E         10         0         0         0         0         0         0         0         0         0         0         0         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2  | _                            | 7.004      | 0       | 0.070    | 0      | 0  | 0      |
| Others         (2,836)         (321)         (65)         0         0         0           Net cash from financing         4,488         (321)         2,614         0         0         0           Net cash at the beginning of the year         551         911         3,006         853         337         489           Exchange difference         18         (21)         4         0         0         0           Cash at the end of the year         911         3,006         853         337         489         934           GROWTH         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         8         111.2%         42.9%         29.9%         27.5%         20.8%           Gross profit         na         na         na         720.6%         68.4%         41.9%           Adj. net profit         na         na         na         na         612.0%         20.9%         27.5%         20.8%           PROFITABLITY         2019A         2020A         2021A         2022E         2023E         2024E           FE 31 Dec         68.2%         (12.2%)         2.0%         15.8%         17.0%         20.   |                              | ,          |         | •        |        |  |        |
| Net cash from financing         4,488         (321)         2,614         0         0         0           Net change in cash         Cash at the beginning of the year         551         911         3,006         853         337         489           Exchange difference         18         (21)         4         0         0         0         0           Cash at the end of the year         911         3,006         853         337         489         934           GROWTH         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         101.9%         111.2%         42.9%         29.9%         27.5%         20.8%           Gross profit         na         na         na         na         720.6%         68.4%         41.9%           Adj. net profit         na         na         na         na         na         na         612.0%           PROFITABILITY         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         (12.2%)         (12.2%)         2.0%         12.9%         17.0%         2.0%           Operating margin         (70.7%)         (31.1%) <t< td=""><td>·</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>   | ·                            |            |         |          |        |  |        |
| Net change in cash           Cash at the beginning of the year         551         911         3,006         853         337         488           Exchange difference         18         (21)         4         0         0         0           Cash at the end of the year         911         3,006         853         337         489         934           GROWTH         2019A         2020A         2021A         202E         202B         2024E           Feenue         101.9%         111.2%         42.9%         29.9%         27.5%         20.8%           Gross profit         na         na         na         720.6%         68.4%         41.9%           Adj. net profit         na         na         na         na         na         na         612.0%           PROFITABILITY         2019A         202A         2021A         202E         202E </td <td></td> <td> ,</td> <td>, ,</td> <td>` '</td> <td></td> <td></td> <td></td>  |                              | ,          | , ,     | ` '      |        |  |        |
| Cash at the beginning of the year         551         911         3,006         853         337         489           Exchange difference         18         (21)         4         0         0         0           Cash at the end of the year         911         3,006         853         337         489         934           CROWTH         2019A         2020A         2021A         2022E         203E         202E           YE 31 Dec         Revenue         101.9%         111.2%         42.9%         29.9%         27.5%         20.8%           Gross profit         na         61.2%         68.4%         41.9%         20.2%         202E         2023E         2024E         2020F         20.0%         68.4%         41.9%         60.6%         68.4%         41.9%         20.0%         20.2%         2021E         2023E         2024E         2021B         2021B         2021B         2022E         2023E         2024E         2021B         2021B         2023E         2024E         2021B         2029B         2023E         2024E  | Net cash from financing      | 4,400      | (321)   | 2,614    | U      | U  | U      |
| Exchange difference         18         (21)         4         0         0         0           Cash at the end of the year         911         3,006         853         337         489         934           GROWTH         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         8         42.9%         29.9%         27.5%         20.8%           Gross profit         na         na         na         720.6%         68.4%         41.9%           Adj. net profit         na         na         na         na         na         na         612.0%           PROFITABILITY         2019A         2020A         2021A         2022E         203E         2024E           YE 31 Dec         (45.6%)         (12.2%)         2.0%         12.9%         17.0%         2.0%           Operating margin         (70.7%)         (31.1%)         (19.2%)         (5.8%)         (1.0%)         2.8%           Adj. net profit margin         (68.2%)         (32.0%)         (14.9%)         (3.8%)         0.6%         3.8%           Return on equity (ROE)         na         na         na         (198.2%)         (6.3%)         (0.6%)         <  | _                            |            |         |          |        |  |        |
| Cash at the end of the year         911         3,006         853         337         489         934           GROWTH         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         Revenue         101.9%         111.2%         42.9%         29.9%         27.5%         20.8%           Gross profit         na         na         na         720.6%         68.4%         41.9%           Adj. net profit         na         na         na         na         na         na         na         612.0%           PROFITABILITY         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         Cross profit margin         (45.6%)         (12.2%)         2.0%         12.9%         17.0%         20.0%           Operating margin         (45.6%)         (12.2%)         2.0%         12.9%         17.0%         20.0%           Adj. net profit margin         (68.2%)         (32.0%)         (14.9%)         (6.8%)         (1.0%)         2.8%           Return on equity (ROE)         na         na         (198.2%)         (6.3%)         (0.6%)         5.4%           YE 31 Dec   | 9 9 ,                        |            |         | •        |        |  |        |
| GROWTH         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec           Revenue         101.9%         111.2%         42.9%         29.9%         27.5%         20.8%           Gross profit         na         na         na         720.6%         68.4%         41.9%           Adj. net profit         na         na         na         na         na         na         na         612.0%           PROFITABILITY         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         Gross profit margin         (45.6%)         (12.2%)         2.0%         12.9%         17.0%         20.0%           Operating margin         (45.6%)         (12.2%)         2.0%         12.9%         17.0%         20.0%           Operating margin         (68.2%)         (32.0%)         (14.9%)         (3.8%)         0.6%         3.8%           Return on equity (ROE)         na         na         (19.2%)         (6.3%)         (0.6%)         5.4%           GEARING/LIQUIDITY/ACTIVITIES         2019A         2020A         2021A         2022E         2023E         2024E           YE 31   | 5                            |            | , ,     |          |        |  |        |
| YE 31 Dec         Revenue         101.9%         111.2%         42.9%         29.9%         27.5%         20.8%           Gross profit         na         na         na         720.6%         68.4%         41.9%           Adj. net profit         na         612.0%           PROFITABILITY         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         Gross profit margin         (45.6%)         (12.2%)         2.0%         12.9%         17.0%         20.0%           Adj. net profit margin         (68.2%)         (32.0%)         (14.9%)         (5.8%)         (1.0%)         2.8%           Adj. net profit margin         (68.2%)         (32.0%)         (14.9%)         (3.8%)         0.6%         3.8%           Return on equity (ROE)         na         na         (198.2%)         (6.3%)         (0.6%)         5.4%           GEARING/LIQUIDITY/ACTIVITIES         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec           VALUATION   | Cash at the end of the year  | 911        | 3,006   | 853      | 337    | 489  | 934    |
| Revenue         101.9%         111.2%         42.9%         29.9%         27.5%         20.8%           Gross profit         na         na         na         720.6%         68.4%         41.9%           Adj. net profit         na         na         na         na         na         na         na         na         na         68.4%         41.9%           PROFITABILITY         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         Gross profit margin         (45.6%)         (12.2%)         2.0%         12.9%         17.0%         20.0%           Adj. net profit margin         (45.6%)         (32.0%)         (19.2%)         (5.8%)         (1.0%)         2.8%           Adj. net profit margin         (68.2%)         (32.0%)         (14.9%)         (3.8%)         0.6%         3.8%           Return on equity (ROE)         na         na         (198.2%)         (6.3%)         (0.6%)         5.4%           GEARING/LIQUIDITY/ACTIVITIES         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         Ne debt to equity (x)         na         na         (0.9)         (0.9)         (0   | GROWTH                       | 2019A      | 2020A   | 2021A    | 2022E  | 2023E  | 2024E  |
| Gross profit         na         na         na         na         720.6%         68.4%         41.9%           Adj. net profit         na         na         na         na         na         na         612.0%           PROFITABILITY         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         Transpir         (45.6%)         (12.2%)         2.0%         12.9%         17.0%         20.0%           Operating margin         (70.7%)         (31.1%)         (19.2%)         (5.8%)         (1.0%)         2.8%           Adj. net profit margin         (68.2%)         (32.0%)         (14.9%)         (3.8%)         0.6%         3.8%           Return on equity (ROE)         na         na         (198.2%)         (6.3%)         (0.6%)         5.4%           GEARING/LIQUIDITY/ACTIVITIES         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         Net debt to equity (x)         na         na         (0.9)         (0.9)         (0.9)         (1.0%)           Current ratio (x)         6.8         3.2         4.5         3.9         3.4         3.2           VALUATION  | YE 31 Dec                    |            |         |          |        |  |        |
| Adj. net profit         na         na         na         na         na         612.0%           PROFITABILITY         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         Cross profit margin         (45.6%)         (12.2%)         2.0%         12.9%         17.0%         20.0%           Operating margin         (70.7%)         (31.1%)         (19.2%)         (5.8%)         (1.0%)         2.8%           Adj. net profit margin         (68.2%)         (32.0%)         (14.9%)         (3.8%)         0.6%         3.8%           Return on equity (ROE)         na         na         (198.2%)         (6.3%)         (0.6%)         5.4%           GEARING/LIQUIDITY/ACTIVITIES         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         Net debt to equity (x)         na         na         (0.9)         (0.9)         (0.9)         (1.0%)           Current ratio (x)         6.8         3.2         4.5         3.9         3.4         3.2           Receivable turnover days         58.9         19.0         35.1         29.9         25.4         21.6           VALUATION         2019A<  | Revenue                      | 101.9%     | 111.2%  | 42.9%    | 29.9%  | 27.5%  | 20.8%  |
| PROFITABILITY         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         Gross profit margin         (45.6%)         (12.2%)         2.0%         12.9%         17.0%         20.0%           Operating margin         (70.7%)         (31.1%)         (19.2%)         (5.8%)         (1.0%)         2.8%           Adj. net profit margin         (68.2%)         (32.0%)         (14.9%)         (3.8%)         0.6%         3.8%           Return on equity (ROE)         na         na         (198.2%)         (6.3%)         (0.6%)         5.4%           GEARING/LIQUIDITY/ACTIVITIES         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         Net debt to equity (x)         na         na         (0.9)         (0.9)         (0.9)         (1.0)           Current ratio (x)         6.8         3.2         4.5         3.9         3.4         3.2           Receivable turnover days         58.9         19.0         35.1         29.9         25.4         21.6           VALUATION         2019A         2020A         2021A         2022E         2023E         2024E           P/E  | Gross profit                 | na         | na      | na       | 720.6% | 68.4%  | 41.9%  |
| YE 31 Dec           Gross profit margin         (45.6%)         (12.2%)         2.0%         12.9%         17.0%         20.0%           Operating margin         (70.7%)         (31.1%)         (19.2%)         (5.8%)         (1.0%)         2.8%           Adj. net profit margin         (68.2%)         (32.0%)         (14.9%)         (3.8%)         0.6%         3.8%           Return on equity (ROE)         na         na         (198.2%)         (6.3%)         (0.6%)         5.4%           GEARING/LIQUIDITY/ACTIVITIES         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec           Net debt to equity (x)         na         na         (0.9)         (0.9)         (0.9)         (0.9)         (1.0)           Current ratio (x)         6.8         3.2         4.5         3.9         3.4         3.2           Receivable turnover days         58.9         19.0         35.1         29.9         25.4         21.6           YE 31 Dec           P/E         na  | Adj. net profit              | na         | na      | na       | na     | na   | 612.0% |
| Gross profit margin         (45.6%)         (12.2%)         2.0%         12.9%         17.0%         20.0%           Operating margin         (70.7%)         (31.1%)         (19.2%)         (5.8%)         (1.0%)         2.8%           Adj. net profit margin         (68.2%)         (32.0%)         (14.9%)         (3.8%)         0.6%         3.8%           Return on equity (ROE)         na         na         (198.2%)         (6.3%)         (0.6%)         5.4%           GEARING/LIQUIDITY/ACTIVITIES         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec           VALUATION         6.8         3.2         4.5         3.9         3.4         3.2           VALUATION         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec           P/E         na         31.8         na         <   | PROFITABILITY                | 2019A      | 2020A   | 2021A    | 2022E  | 2023E  | 2024E  |
| Operating margin         (70.7%)         (31.1%)         (19.2%)         (5.8%)         (1.0%)         2.8%           Adj. net profit margin         (68.2%)         (32.0%)         (14.9%)         (3.8%)         0.6%         3.8%           Return on equity (ROE)         na         na         (198.2%)         (6.3%)         (0.6%)         5.4%           GEARING/LIQUIDITY/ACTIVITIES         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         Net debt to equity (x)         na         na         (0.9)         (0.9)         (0.9)         (1.0)           Current ratio (x)         6.8         3.2         4.5         3.9         3.4         3.2           Receivable turnover days         58.9         19.0         35.1         29.9         25.4         21.6           VALUATION         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         P/E         na   | YE 31 Dec                    |            |         |          |        |  |        |
| Adj. net profit margin         (68.2%)         (32.0%)         (14.9%)         (3.8%)         0.6%         3.8%           Return on equity (ROE)         na         na         (198.2%)         (6.3%)         (0.6%)         5.4%           GEARING/LIQUIDITY/ACTIVITIES         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec           Net debt to equity (x)         na         na         (0.9)         (0.9)         (0.9)         (1.0)           Current ratio (x)         6.8         3.2         4.5         3.9         3.4         3.2           Receivable turnover days         58.9         19.0         35.1         29.9         25.4         21.6           VALUATION         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec           P/E         na   | Gross profit margin          | (45.6%)    | (12.2%) | 2.0%     | 12.9%  | 17.0%  | 20.0%  |
| Return on equity (ROE)         na         na         (198.2%)         (6.3%)         (0.6%)         5.4%           GEARING/LIQUIDITY/ACTIVITIES         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         Net debt to equity (x)         na         na         (0.9)         (0.9)         (0.9)         (1.0)           Current ratio (x)         6.8         3.2         4.5         3.9         3.4         3.2           Receivable turnover days         58.9         19.0         35.1         29.9         25.4         21.6           VALUATION         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec           P/E         na         31.8           P/E (diluted)         na         na <th< td=""><td>Operating margin</td><td>(70.7%)</td><td>(31.1%)</td><td>(19.2%)</td><td>(5.8%)</td><td>(1.0%)</td><td>2.8%</td></th<>   | Operating margin             | (70.7%)    | (31.1%) | (19.2%)  | (5.8%) | (1.0%)   | 2.8%   |
| GEARING/LIQUIDITY/ACTIVITIES         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec           Net debt to equity (x)         na         na         (0.9)         (0.9)         (0.9)         (1.0)           Current ratio (x)         6.8         3.2         4.5         3.9         3.4         3.2           Receivable turnover days         58.9         19.0         35.1         29.9         25.4         21.6           VALUATION         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec           P/E         na         na         na         na         na         na         31.8           P/E (diluted)         na         31.8  | Adj. net profit margin       | (68.2%)    | (32.0%) | (14.9%)  | (3.8%) | 0.6%   | 3.8%   |
| YE 31 Dec           Net debt to equity (x)         na         na         (0.9)         (0.9)         (0.9)         (1.0)           Current ratio (x)         6.8         3.2         4.5         3.9         3.4         3.2           Receivable turnover days         58.9         19.0         35.1         29.9         25.4         21.6           VALUATION         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         P/E         na         na         na         na         na         na         31.8           P/E (diluted)         na         na         na         na         na         na         31.8   | Return on equity (ROE)       | na         | na      | (198.2%) | (6.3%) | (0.6%)   | 5.4%   |
| Net debt to equity (x)         na         na         (0.9)         (0.9)         (0.9)         (1.0)           Current ratio (x)         6.8         3.2         4.5         3.9         3.4         3.2           Receivable turnover days         58.9         19.0         35.1         29.9         25.4         21.6           VALUATION         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec           P/E         na         na         na         na         na         na         31.8           P/E (diluted)         na         na         na         na         na         na         31.8   | GEARING/LIQUIDITY/ACTIVITIES | 2019A      | 2020A   | 2021A    | 2022E  | 2023E  | 2024E  |
| Current ratio (x)         6.8         3.2         4.5         3.9         3.4         3.2           Receivable turnover days         58.9         19.0         35.1         29.9         25.4         21.6           VALUATION         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         P/E         na         na         na         na         na         na         31.8           P/E (diluted)         na         na         na         na         na         na         31.8  | YE 31 Dec                    |            |         |          |        |  |        |
| Receivable turnover days         58.9         19.0         35.1         29.9         25.4         21.6           VALUATION         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec         P/E         na         na         na         na         na         na         na         31.8           P/E (diluted)         na         na         na         na         na         na         31.8   | Net debt to equity (x)       | na         | na      | (0.9)    | (0.9)  | (0.9)  | (1.0)  |
| VALUATION         2019A         2020A         2021A         2022E         2023E         2024E           YE 31 Dec           P/E         na         na         na         na         na         na         na         31.8           P/E (diluted)         na         na         na         na         na         31.8   | Current ratio (x)            | 6.8        | 3.2     | 4.5      | 3.9    | 3.4  | 3.2    |
| YE 31 Dec           P/E         na         na         na         na         na         31.8           P/E (diluted)         na         na         na         na         31.8  | Receivable turnover days     | 58.9       | 19.0    | 35.1     | 29.9   | 25.4   | 21.6   |
| P/E         na         na         na         na         na         31.8           P/E (diluted)         na         na         na         na         na         31.8   | VALUATION                    | 2019A      | 2020A   | 2021A    | 2022E  | 2023E  | 2024E  |
| P/E (diluted) na na na na 31.8  | YE 31 Dec                    |            |         |          |        |  |        |
|   | P/E                          | na         | na      | na       | na     | na   | 31.8   |
|   | P/E (diluted)                | na         | na      | na       | na     | na   | 31.8   |
|   |                              | na         | na      | 3.8      | 1.8    | 1.8  | 1.6    |

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



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