

China Technology: Internet: BIDU/IQ

2022 profit beat, ads recovery and improving cloud margin to lead positive earnings growth from 30; Buy

BIDU 2022 results came in with inline revenue but strong beat on profits across both Baidu core and IQ (first take), with EPADS (nG) +38%vs. GSe, or +45% vs. consensus. Specifically, 1) Sustainably improving gross margin, paving the way to positive Baidu Core earnings growth in 3Q22E, a trend not seen since 1Q21; 2) Ads % yoy trend saw meaningful recovery into August, pointing to a potentially % yoy flat 3Q; and 3) Above-industry 31% yoy cloud revenue growth vs. peers at between -6% to +10%, with likely sequential acceleration into 2H22E. We believe this set of result should further demonstrate management's solid execution towards resuming Baidu core positive earnings growth in 3Q22E through ongoing margin improvement across both its relatively resilient ad business (40%+ OP margin) and rapidly growing Al cloud (margin improved both yoy and gog), with additional savings from S&M and G&A to unlock in 2H22E, before incremental revenue from large-scale commercialization of its ASD order and JIDU EV delivery starting 2H23E.

Key to watch ahead: 1) Ads sequential recovery trend into Sept, 2) Jidu EV order collection starting 4Q22, 3) milestones on Apollo Go and Robotaxi regulation updates.

Key surprises from the 2Q result and briefing highlights

- 1. Sound improvement in gross margin, to resume positive earnings growth in 3022E. Baidu's solid profit beats came predominately from improvement in GPM (3.7ppts ahead of GSe), this was despite the drop in revenue contribution from the higher-margin online marketing and amounted to 62% of group revenue, reflecting the intrinsic profitability improvement across both Baidu's online marketing (through trimming down low-margin non-core business) and cloud businesses (through trimming down low-margin CDN business while focusing on projects with a high degree of standardization), both of which should sustain in 2H22E.
- 2. Ads % yoy trend saw meaningful recovery into August, pointing to a potentially flat 3Q. Baidu's -10% yoy decline in ads revenue came in as a beat vs. GSe/Visible Alpha Consensus Data in 2022; more importantly, we expect it to continue to demonstrate relative resilience with a projected -1% yoy decline

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- in 3Q22E, backed by materialization of growth initiatives in verticals such as e-commerce and healthcare, and by transaction-focused performance advertising which is set to demonstrate relative resilience compared vs brand advertising, as evidence by a **month by month recovery from June to August.**
- **3. Above-industry 31% yoy cloud revenue growth** vs. peers at between -6% to +10%, with likely sequential acceleration into 2H22E, led by solid growth of non-IAAS cloud revenue from verticals including smart transportation and public service sector, energy, utilities, and smart cities.

What to do with the stocks

On Baidu, we leave our 2022E revenue estimates for Baidu largely unchanged amid its relative resilience across both ads and AI cloud businesses while raising our net profit estimates by 12% on gross margin improvement from the restructuring of its unprofitable business group at core search, the trimming of less profitable contracts at cloud and better profitability of IQ. For 2023-24E, we trim our estimates for Baidu's group level revenue by 2-5% in 2023-24E but raise our non-GAAP net profit by 2-4%, on 1) solid execution on GPM improvement despite the mix shift towards AI cloud; and 2) lower long-term ad revenue growth reflecting a slower growth path in the China online advertising industry. Our SOTP-based target prices for BIDU/9888.HK are trimmed slightly to US\$207/HK\$202 (vs. US\$212/HK\$207 prior), implying 22.7x 2023E P/E. Stay Buy with 41%/38% implied upside.

On iQIYI, we trim our 2022-24E revenue forecasts by 0-2%, and revise our non-GAAP operating margin forecasts by +1.6pp/-0.1pp/-0.1pp, respectively, to reflect the better visibility into IQ's profitability thanks to management's better cost controls on content cost and SG&A expenses. We raise our 2022-24E net profit significantly due to better control of content cost, lower GAAP SG&A expenses on lower marketing spending, personnel and share-based compensation expenses, along with the company's organizational structure optimization.

Consequently, we revise our 12m DCF-based valuation for iQIYI down by -10.5% to **US\$5.1** from US\$5.7 prior (based on 14% WACC derived from 3.5% risk-free rate, 7% equity market premium and beta of 1.5, and terminal growth rate of 3%, from prior terminal growth rate of 5%), implying 1.3x 2023E EV/Sales. Stay **Neutral**.

Exhibit 1: Our forecast revisions for Baidu

Baidu Group	New		New		New	
Rmb mn	2022E	Chg %	2023E	Chg %	2024E	Chg %
Total net revenue	128,488	-0.5%	146,490	-1.9%	167,808	-5.4%
Online marketing revenue	77,092	-0.1%	82,557	-0.1%	86,818	-0.1%
Other services	51,396	-1.0%	63,932	-4.0%	80,991	-10.5%
Net profit, non-GAAP	20,348	12.5%	21,473	4.4%	26,020	1.8%

Source: Goldman Sachs Global Investment Research

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iQIYI	New		New		New	
Rmb mn	2022E	Diff.	2023E	Diff.	2024E	Diff.
Total revenues	28,974	0%	30,394	-2%	33,020	-2%
Net (loss)/income, non-GAAP	509	458%	1,120	11%	2,171	5%
Net margin, non-GAAP	1.8%	1.4	3.7%	0.4	6.6%	0.4

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

Baidu (BIDU/9888.HK): 2022 beat, improving ads efficiency and cloud outperformance the bright spot; Buy

Key highlights

1. Core search and feed: Relative resilience amid strength from growth verticals, sequential recovery from June to August

In 2Q22, Baidu core search revenue dropped by -10% yoy to Rmb17.1bn, slightly ahead of GSe -13% yoy, with the drag due to weakened macro-induced downward pressures on eCPM and advertising budget cutbacks across verticals, including travel and franchising. That said, management expects online marketing to improve meaningfully in 3Q compared with 2Q, indicating a month by month recovery from June to August (i.e. August improved from July, July improved meaningfully from June) given loosening COVID restriction measures, in-line with our high frequency tracker following Baidu advertising clients' engagement.

By advertising client verticals:

- Verticals with high offline exposure: Management noted demand from retail, local services, franchising, were impacted in April and May but have improved since June; Tourism saw weakened demand in August, after the COVID resurgence in Hainan (Sanya) and Xinjiang. Additionally, management has not observed a meaningful adverse impact from the COVID-resurgence in Shenzhen, while noting Beijing has seen COVID containment.
- **Growth verticals: e-commerce** remains relatively resilient amongst all verticals with % yoy growth of cpc, as Baidu captures ad budgets from e-commerce platforms (PDD and JD). GMV facilitated by Baidu grew 127% yoy in 2Q22 and accelerated to 260% yoy during the 6.18 shopping festival.
- Competition-wise, while acknowledging recent ad monetization progress of the Weixin Video Account, management believes the incremental inventory will not alter the pricing trend of the broader ad industry massively, while Baidu Search ad properties remain unique with strong commercialized intent.

Exhibit 3: Baidu: % yoy of ad revenue and our online marketing tracker

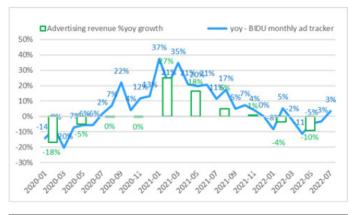


Exhibit 4: Baidu performance ads: Volume exposure by vertical

Analysis includes inventories from Baidu Mobile, Baidu Tieba, Baidu Browser, Baidu Haokan Video and Baidu Ad Union

Ads verticals		1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	22-Jul	22-Aug
HealthCare	医药保健	2.4%	2.3%	2.5%	2.4%	6.2%	3.3%	1.7%	7.0%
Franchising	招商加盟	2.8%	4.5%	4.7%	4.7%	4.6%	3.9%	4.3%	4.0%
Home renovation	家居家装	4.7%	6.4%	5.6%	4.9%	5.0%	4.4%	3.2%	4.4%
Travel & lodging	旅游住宿	1.5%	2.9%	3.4%	1.1%	1.9%	3.6%	6.4%	0.6%
Broader e-commerce	综合电商	2.1%	4.3%	4.7%	4.2%	11.3%	8.4%	2.3%	4.6%
Game	游戏	13.8%	7.6%	5.6%	4.6%	4.0%	4.8%	7.5%	19.5%
Entertainment	文化娱乐	6.8%	12.0%	6.4%	5.9%	9.5%	16.7%	24.0%	5.8%
Education	教育培训								
Finance	金融								
Domestic services	生活服务								
Industrial and Agriculture	工农业								
Auto	汽车用品								
F&B	食品饮料								
Dating	社交婚恋								
3C	数码家电								
Cosmetics	彩妆护肤								
Watch & jewelry	钟表首饰								
Real estate	房地产								
Others		17.5%	9.2%	15.1%	26.1%	10.9%	13.6%	13.6%	10.2%
Verticals negatively impacted by lockdown		11.4%	16.1%	16.1%	13.2%	17.7%	15.2%	15.6%	15.9%
Verticals benefit from lockdown		20.6%	19.7%	12.1%	10.5%	13.5%	21.5%	31.5%	25.3%

Source: AppGrowing, Goldman Sachs Global Investment Research

We forecast Baidu's core online marketing revenue to decline -1% yoy in 3Q22E and -2% yoy in 2022E. While covid lockdowns and slower macro recovery have distorted the original recovery path for Baidu ads, we expect a 9ppt sequential recovery into 3Q22E, as transaction-focused performance advertising is set to demonstrate relative resilience compared to brand advertising.

2. Al Cloud

Still above-peer revenue growth of 31% yoy in 2022: Baidu Al Cloud revenue

continued to deliver above-industry growth of +31% yoy (vs. 45% yoy in 1Q22) to Rmb4.5bn. Management attributed its resilient cloud revenue growth to:

- 1. By product, the rapid growth in Baidu Al cloud has been driven by enterprise cloud (+40% yoy), by importance: smart transportation, industrial (energy, utilities, manufacturing), smart cities, given the competitive advantage of Al Cloud in these verticals. Personal Cloud has seen slower growth at 10% yoy. Baidu ACE smart transportation cloud, saw revenue grown by 40% yoy in 2Q22, which has been adopted by 51 cities by end 2Q22, vs. 41 cities by end-1Q22.
- 2. Baidu Robotaxi, saw Apollo Go provided 287K rides (+500% yoy/+50% qoq) in 2Q22. On July 20, 2022, Apollo Go reached 1mn accumulated rides. Apollo Go started offering fully driverless ride-hailing services on open roads and received the permits to collect fees from the passengers in Chongqing and Wuhan on Aug 8, 2022, after receiving the permits in Yizhuang region of Beijing on July 20, 2022.
- 3. Baidu ASD. Management noted its cumulative backlog with OEMs has reached Rmb10.3bn as of 2Q22. The ASD backlog includes contract value from the automakers' nomination letters, such as BYD, with revenue recognition commencing 12-18 months after contract signing and amortized based on a car life cycle of 5 years. Management noted revenue contribution from the ASD backlog should materialize in 2H23-2026.
- **4. Margin.** Management expect to see OPM breakeven for Al cloud within the next 2-3 years, noting it has been gradually scaling back the lower margin CDN businesses, while focusing on differentiated vertical solutions with a high degree of standardization. For example, they indicated that the project margin of its Guangzhou City Water project has reached 20-30%, as Baidu replicates the know-how it has gathered through the Quanzhou City Water project.
- 5. Baidu unveiled its 6th generation robotaxi vehicle Apollo RT6 in July 2022 and management expects to launch a sizeable operation in 2024.

We forecast Baidu Al Cloud revenue growth of 45% yoy in 3Q22E and 42% yoy in 2022E, with 3Q accelerating by 14ppts relative to 2Q and continuing to deliver above-industry cloud revenue growth for both 3Q and the full year.

Multiple tailwinds to drive cloud margin improvement. Management noted Baidu Al cloud is operating with a positive GPM similar to 1Q22, specifically:

- Personal cloud operates with positive OP margin with growth slower than aggregate
 Al Cloud;
- Al cloud, enterprise cloud operate with positive gross margins and negative (but improving %yoy/%qoq) EBIT margins;
- Expects to see ACE Smart Transportation Cloud breakeven in the coming quarters, quicker than the other verticals.
- Expect narrow losses on OP margin in the coming quarters.

3. Margin

Baidu's solid profit beats (EPADS-nG, 38% vs. GSe, or 45% vs. Consensus) came predominately from improvement in GPM (3.7ppts ahead of GSe), this was despite the drop in revenue contribution from the higher-margin online marketing which amounted to 62% of group revenue, reflecting the intrinsic profitability improvement across both Baidu's online marketing (through trimming down low-margin non-core business) and cloud businesses (through trimming down low-margin CDN business while focusing on projects with a high degree of standardization). Baidu Core also delivered 22% core OPM in 2Ω22, sequentially improving from 1Ω22's 17%.

For 3Q22E, we expect Baidu core OPM to achieve positive % yoy improvement, driven by: **1)** Ongoing savings from S&M, G&A expenses due to the sequential decline in headcount in 2Q22; **2)** Sequentially improving online marketing margin driven by leverage from recovery of ad revenue, and better GPM, similar to 1Q22. We believe both factors should pave the way for continued margin expansion in 2H22E, with the pace moderating when Baidu meets the one-year anniversary of its restructuring (in Dec-22).

From 2023E onwards, we expect online marketing margins to recovery moderately, with the main driver shifting from headcount downsizing to revenue improvement. While we expect Al Cloud OP loss margin to improve yoy, its relatively quicker pace of revenue growth will continue to drive a margin dilutive mix shift for the Baidu Core.

4. Other highlights JIDU

Management expects the mass-market ROBO-1 to complete development very soon, and to continue maintaining its timeline of taking orders later 2022 with delivery to commence in 2023. The ROBO-1 will be equipped with ANP 3.0, Baidu's most advanced intelligent driving software.

Financials and valuation

Exhibit 5: Summary of earnings drivers of BIDU

Rmb mn	1Q21	2021	3Q21	4Q21	1022	2022	2Q22E	Diff %	QoQ %	YoY %
Online marketing revenue	18,094	20,828	21,050	20,723	16,929	18,268	17,687	3%	8%	-12%
Other services (iQIYI subscription, Cloud)	10,040	10,522	10,871	12,365	11,482	11,379	11,949	-5%	-1%	8%
Total net revenue	28,134	31,350	31,921	33,088	28,411	29,647	29,636	0%	4%	-5%
Total cost of revenues	15,002	15,897	16,126	17,289	15,546	15,171	16,261	-7%	-2%	-5%
Gross profit, non-GAAP	13,211	15,565	15,869	15,933	12,947	14,561	13,461	8%	12%	-6%
Selling, general, & administrative expenses	4,774	5,224	5,991	5,918	4,279	4,341	4,495	-3%	1%	-17%
Research & development expenses	4,149	4,762	5,246	5,964	4,744	4,799	4,815	0%	1%	1%
Share-based compensation	1,499	2,116	1,348	2,093	1,323	2,021	1,891	7%	53%	-4%
Total operating costs, GAAP	10,422	12,102	13,561	13,975	10,346	11,161	11,201	0%	8%	-8%
Operating profit, GAAP	2,789	3,463	2,308	1,958	2,601	3,400	2,261	50%	31%	-2%
Operating profit, non-GAAP	4,362	5,653	4,708	4,307	3,996	5,493	4,230	30%	37%	-3%
Interest income, net	410	497	582	641	744	784	699	12%	5%	58%
Pre-tax income	26,566	1,033	(19, 186)	2,365	(360)	3,551	2,729	30%	NM	244%
Provision for income taxes	1,534	2,197	(1,839)	1,295	391	25	799	-97%	-94%	-99%
Minority interest	(621)	(581)	(788)	(645)	134	(111)	(64)	-72%	NM	81%
Net profit, GAAP	25,032	(1,164)	(17,347)	1,070	(751)	3,526	1,931	83%	NM T	NM
SBC	1.325	1,947	1,231	1,941	1,210	1,916	1.891	1%	58%	-2%
Net profit, non-GAAP	4,297	5,359	5,090	4,084	3,879	5,541	3,886	43%	43%	3%
EPADS, GAAP (Rmb)	73.90	(1.68)	(47.69)	4.87	(2.56)	10.35	5.76	80%	NM F	NM
EPADS, non-GAAP (Rmb)	12.38	15.41	14.66	11.60	11.22	15.77	11.21	41%	41%	2%
As a % of total net revenue	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	2Q22E	Diff (pp)	QoQ (pp) Y	oY (pp)
Gross profit, non-GAAP	47.0%	49.6%	49.7%	48.2%	45.6%	49.1%	45.4%	3.7	3.5	(0.5)
Selling, general, & administrative	17.0%	16.7%	18.8%	17.9%	15.1%	14.6%	15.2%	(0.5)	(0.4)	(2.0)
Research & development	14.7%	15.2%	16.4%	18.0%	16.7%	16.2%	16.2%	(0.1)	(0.5)	1.0
Share-based compensation	5.3%	6.7%	4.2%	6.3%	4.7%	6.8%	6.4%	0.4	2.2	0.1
GAAP operating profit	9.9%	11.0%	7.2%	5.9%	9.2%	11.5%	7.6%	3.8	2.3	0.4
Non-GAAP operating profit	15.5%	18.0%	14.7%	13.0%	14.1%	18.5%	14.3%	4.3	4.5	0.5
Baidu Core	24.7%	26.9%	23.6%	18.7%	17.2%	21.8%	17.9%	3.9	4.6	(5.1)
IQ Core	-8.3%	-10.2%	-14.1%	-7.0%	4.5%	6.2%	2.4%	3.8	1.8	16.5
GAAP net income	89.0%	-3.7%	-54.3%	3.2%	-2.6%	11.9%	6.5%	5.4	14.5	15.6
Non-GAAP net income	15.3%	17.1%	15.9%	12.3%	13.7%	18.7%	13.1%	5.6	5.0	1.6

Source: Company data, Goldman Sachs Global Investment Research

Exhibit 6: We expect Baidu Core revenue to grow +6%/+6% yoy in 3022E/2022E

Delider (Deeds on a)	2018	2019	2020	2021	2022E	2023E	2024E		1Q21	2021	3Q21	4Q21	1022	2022	3Q22E	4Q22E
Baidu (Rmb mn)	2018	2019	2020	2021												
Total net revenue	102,277	107,413	107,074	124,493	128,488	146,490	167,808		28,134	31,350	31,921	33,088	28,411	29,647	33,363	37,067
% yoy	28%	5%	0%	16%	3%	14%	15%		25%	20%	13%	9%	1%	-5%	5%	12%
Baidu core	78,271	79,701	78,685	95,163	100,443	117,155	136,001		20,483	24,041	24,661	25,978	21,378	23,160	26,252	29,652
% yoy	24%	2%	-1%	21%	6%	17%	16%		34%	27%	15%	12%	4%	-4%	6%	14%
% gog									-11%	17%	3%	5%	-18%	8%	13%	13%
Core search (incl. feed)	72,584	69,822	66,018	73,628	71,873	76,954	80,802		16,177	19,003	19,390	19,058	15,592	17,074	19,196	20,011
% yoy	16%	-4%	-5%	12%	-2%	7%	5%		27%	18%	6%	1%	-4%	-10%	-1%	5%
% qoq									-14%	17%	2%	-2%	-18%	10%	12%	4%
Al Cloud	3,391	6,384	9,076	15,073	21,394	31,022	43,430		2,700	3,300	3,706	5,367	3,915	4,323	5,373	7,783
% yoy		88%	42%	65%	42%	45%	40%		55%	71%	73%	65%	45%	31%	45%	45%
% qoq									-17%	22%	12%	45%	-27%	10%	24%	45%
Core (others)	2,296	3,495	3,590	6,461	7,175	9,179	11,770		1,605	1,738	1,566	1,553	1,671	1,763	1,683	1,858
% yoy	410%	52%	3%	80%	11%	28%	28%		96%	94%	79%	55%	17%	1%	8%	20%
% qoq								_	61%	8%	-10%	-1%	21%	-6%	-5%	10%
iQIY	24,989	28,994	29,707	30,554	28,974	30,394	33,020		7,968	7,608	7,589	7,389	7,277	6,657	7,281	7,760
% yoy	704%	16%	2%	3%	-5%	5%	9%		4%	3%	6%	-1%	-9%	-13%	-4%	5%
% qoq									7%	-5%	0%	-3%	-2%	-9%	9%	7%
Video core (iQIYI member + ads	19,951	22,706	23,313	23,780	22,843	24,067	26,509		6,228	5,818	5,949	5,785	5,809	5,479	5,548	6,008
% yoy	36%	14%	3%	2%	-4%	5%	10%		1%	3%	2%	2%	-7%	-6%	-7%	4%
% qoq									9%	-7%	2%	-3%	0%	-6%	1%	8%
D. I. A. LOD. CAAD	20 125	42.000	24 722	40.020	22.220	25.240	20.204		1 202	F 0F2	4.700	4 207	2.000	F 402	C 507	0.240
Baidu total OP, non-GAAP	20,425 20.0%	12,800 11.9%	21,733 20.3%	19,030 15.3%	22,326 17.4%	25,319 17.3%	30,281 18.0%		4,362 15.5%	5,653 18.0%	4,708 14.7%	4,307 13.0%	3,996 14.1%	5,493 18.5%	6,587 19.7%	6,249 16.9%
% OP margin, non-GAAP																
Baidu core OP, non-GAAP	28,020	20,311	26,367	22,201	20,910	23,220	27,012		5,064	6,467	5,823	4,847	3,687	5,122	6,224	5,878
% OP margin, non-GAAP	35.8%	25.5%	33.5%	23.3%	20.8%	19.8%	19.9%		24.7%	26.9%	23.6%	18.7%	17.2% 327	22.1% 344	23.7%	19.8%
iQIYI core OP, non-GAAP	(7,623) -30.5%	(7,815) -27.0%	(4,477) -15.1%	(3,027) -9.9%	1,504 5.2%	2,200 7.2%	3,385 10.3%		(658) -8.3%	(780) -10.2%	(1,073) -14.1%	(515) -7.0%	4.5%	5.2%	413 5.7%	421 5.4%
% OP margin, non-GAAP	-30.5%	-27.0%	-15.1%	-9.9%	5.2%	1.2%	10.3%		-8.3%	-10.2%	-14.1%	-7.0%	4.5%	5.2%	5.7%	5.4%
Baidu total NP, non-GAAP	23,976	18,182	22.020	18,830	20,348	21,473	26,020		4.297	5.359	5,090	4.084	3,879	5,541	5,554	5,374
% NP margin, non-GAAP	23.4%	16.9%	20.6%	15.1%	15.8%	14.7%	15.5%		15.3%	17.1%	15.9%	12.3%	13.7%	18.7%	16.6%	14.5%
Baidu core NP, non-GAAP	29,059	22,824	25,194	21,292	19,474	19,905	23,337	1	4,870	5,942	5,855	4,625	3,804	5,449	5,087	5,133
% NP margin, non-GAAP	37.1%	28.6%	32.0%	22.4%	19.4%	17.0%	17.2%		23.8%	24.7%	23.7%	17.8%	17.8%	23.5%	19.4%	17.3%
iQIYI core NP, non-GAAP	(8,647)	(8,812)	(5,476)	(4,549)	492	1,120	2,171		(1,031)	(1.084)	(1,422)	(1,013)	157	66	199	70
% NP margin, non-GAAP	-34.6%	-30.4%	-18.4%	-14.9%	1.7%	3.7%	6.6%		-12.9%	-14.2%	-18.7%	-13.7%	2.2%	1.0%	2.7%	0.9%

We leave our 2022E revenue estimates for Baidu largely unchanged amid its relative resilience across both ads and AI cloud businesses while raising our net profit estimates by 12% on gross margin improvement from the restructuring of its unprofitable business group at core search, the trimming of less profitable contract at cloud and better profitability of IQ. For 2023-24E, we trim our estimates for Baidu's group level revenue by 2-5% in 2023-24E but raise our non-GAAP net profit by 2-4%, on 1) solid execution on GPM improvement despite mix the shift towards AI cloud; and 2) lower long-term ad revenue growth reflecting a slower growth path in the China online advertising industry. Our SOTP-based target prices for BIDU/9888.HK are trimmed slightly to US\$207/HK\$202 (vs. US\$212/HK\$207 prior), implying 22.7x 2023E P/E. Stay Buy with 41%/38% implied upside.

Key risks: Slower recovery in macro and advertising spending, higher-than-expected competition in the advertising/search industry, worse-than-expected investment spending, slower-than-expected progress in EV launch, delay in major autonomous driving milestones.

Exhibit 7: Our forecast revisions for Baidu

Baidu Group	New		New		New	
Rmb mn	2022E	Chg %	2023E	Chg %	2024E	Chg %
Total net revenue	128,488	-0.5%	146,490	-1.9%	167,808	-5.4%
Online marketing revenue	77,092	-0.1%	82,557	-0.1%	86,818	-0.1%
Other services	51,396	-1.0%	63,932	-4.0%	80,991	-10.5%
Net profit, non-GAAP	20,348	12.5%	21,473	4.4%	26,020	1.8%

Source: Goldman Sachs Global Investment Research

Core, Advertising 2.9x 225.419 33.645 33,645 95.8 46% 40% OPM, 20% tax Cloud (ex ACE) 113,229 16,900 100% 48.1 23% 5x 2023E rev; DCF @ 12% WACC/5% TGR, TFCF Margin 10% iQiyi, long form video 1.0x 29.987 4.476 2.327 6.6 3% G5 target valuation 17,877 80% 40.9 20% Autos 11.0x 119,774 14,356 - Apollo (ACE, Robotaxi) 72.594 10,835 10,835 30.9 15% 7,042 5,100 10.0 **8.7** - Inteligent EV 20.8x 47.180 3.521 5% DCF (15% WACC) 34,170 3,060 Xiaodu Last round valuation Subtotal 70,288 97% 200 Investments Trip.com Group 149,021 22,242 2,558 GS target valuation Travel Entertainment 174 0.5 DiDi Global Ride hailing 50.679 Market Cap XGimi Technology 22,850 3,410 9.9% 337 1.0 0% Market Cap Hardware China Unicom Telecom 119.317 17,809 1.4% 249 0.7 0% Market Cap 4.1% 10,472 1,563 63 0.2 0% Zhihu Entertainment GS target valuation Yusys Technologies Bank IT solutions 2,349 123 0.3 Cloud Village Entertainmen 20.790 3,103 3.9% 122 0.3 0% Market Cap HAND Enterprise Solutions Enterprise IT solutions 8,310 1,240 5.3% 65 0.2 Market Cap 9.1% 44 0.1 E-commerce Market Cap Qeeka Interior design SaaS 101 12 0.0 0% Market Cap 4,557 Total investments 13.0 6% 74,844 213.2 Core op. + investm 103% 59.1 2022E net cash (ex IQ) Net cash 20,757 29% NAV 32 Ox 30 0v 95 604 272 3 132% less holdco discount 24% (22 944 Discount based on 5-yr avg, ex-period of 0% core growth (65.4)-32%

72.657

566,724

207

202

Exhibit 8: Our SOTP valuation is trimmed slightly to US\$207/HK\$202

24.1x

22.7x

3.3x

Source: Goldman Sachs Global Investment Research

Total, in US\$mn

Total, in HK\$mn

iQIYI (IQ): 2022 a proven quarter on execution, 2022E profitability intact despite macro headwinds; TP up to US\$5.7; Neutral

Key highlights

IQ report in-line revenue, and the second consecutive positive operating and net profit this quarter, delivering 5% OPM. The profit increase came from aggressive cost control (content cost/S&M expenses down 24%/32% yoy).

- Total revenues declined -13% yoy to Rmb6.7bn, largely in line with GSe/Visible Alpha Consensus Data consensus. By segment:
- Membership services: 1)average daily subscribers drop 3.1mn qoq to 98.3mn, and 2) monthly ARPPU at Rmb14.53, +8% yoy/-1% qoq thanks to IQ's continuous monetization initiatives and launching a variety of premium content to enhance user experience
- Online advertising services revenue was Rmb1.2bn, decreasing 35% yoy, primarily due to challenging macro, covid resurgence and new strategy leading to fewer number of variety shows launched.
- Collaboration with Douyin to bring additional traffic and positive impact on revenue, profit and cash flow, which should materialize (in content distribution segment) from 3Q22. Longer-term IQ expects deeper collaboration in products, technology and daily operations with Douyin.
- Non-GAAP operating profit for the quarter reached 343.8mn, vs. Rmb779.4mn loss a year ago. Non-GAAP diluted EPADS for the quarter came in at **Rmb0.1**, primarily attributable to **1) better control of content cost** of Rmb3.9bn (down 24% yoy, accounting for 58% of revenues compared with 60% of revenues in 1Q22); **2) much**

- **lower GAAP SG&A expenses** at Rmb800.6mn, down 32% yoy, on lower marketing spending, personnel and share-based compensation expenses. R&D expenses decreased by 29% yoy as well.
- Agreement with PAG: iQIYI has announced a US\$500mn Convertible Notes private placement with PAG which is expected to close in 4Q22.

Details

IQ's total revenues declined **-9% yoy to Rmb6.7b**, largely in line with GSe/Visible Alpha (VA) Consensus Data. By segment:

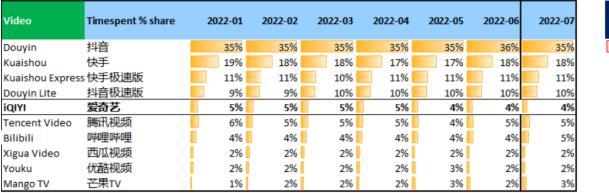
- **1. Membership services** revenue was Rmb4.3bn, **+7%/-4% yoy/qoq** and consistent with GSe with stronger ARPPU offsetting softer subscribers, delivering positive operating cash flow of Rmb47mn for the first quarter.
- Average daily subscribers drop 3.1mn qoq to 98.3mn, attributable to: 1)2Q is off-season of the year, 2) Covid resurgence hindered movie releases, and stricter content approval requirement, driving lower numbers of movies and contents offerings on the platform.
- Monthly **ARPPU at Rmb14.53**, +8% yoy/-1% qoq thanks to IQ's continuous monetization initiatives and launching a variety of premium contents to enhance user experience, especially driven by newly-launched membership package on TV devices (monthly active TV member +15% yoy). Apart from the active acquisition of TV devices members, iQIYI continue to enhance its ability to improve member retention, attract new users and win back churned users by:
 - □ launching diverse content to cater to the different preference of various user cohorts
 - □ strengthening membership benefits, including more membership privileges (early access, exclusive shows, etc), as well as marketing campaigns to provide members with various benefits on a wide variety of brands.

We forecast membership services revenue to grow 1% yoy/5% yoy in 3Q22E/2022E, driven by average daily subs movement of -10% yoy/-4% yoy, with ARPPU projected to grow +12% yoy/+9% yoy thanks to IQ's membership pricing adjustment and monetization initiatives.

VS. June%yoy chg
-6%
1%
-4%
-2%
0%
4%
3%
6%
16%
5%

Exhibit 9: Aggregate timespent of iQiyi app drops 34% yoy, with timespent share dropped 0.2ppt vs. June

Video	Timespent % yoy	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07
Douyin	抖音	37%	29%	41%	36%	20%	16%	10%
Kuaishou	快手	2%	-3%	4%	7%	-3%	-6%	-5%
Kuaishou Expres	ss 快手极速版	48%	34%	50%	54%	39%	30%	26%
Douyin Lite	抖音极速版	89%	77%	80%	65%	41%	32%	30%
iQIYI	爱奇艺	-14%	-13%	-9%	6%	-14%	-34%	-34%
Tencent Video	腾讯视频	9%	0%	6%	3%	-2%	7%	11%
Bilibili	哔哩哔哩	47%	32%	55%	57%	41%	36%	39%
Xigua Video	西瓜视频	-2%	8%	13%	16%	6%	2%	8%
Youku	优酷视频	-2%	-1%	1%	42%	42%	7%	23%
Mango TV	芒果TV	-42%	-19%	5%	17%	14%	17%	22%
Total		20%	15%	25%	27%	13%	8%	7%
Video	Timespent % share	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07
Douyin	抖音	35%	35%	35%	35%	35%	36%	35%
Kuaishou	仲壬	19%	18%	18%	17%	17%	19%	19%



Source: QuestMobile

Exhibit 10: Since the launch of the hit drama Love Between Fairy and Devil (苍兰诀) on 7 August 2022, MAU, DAU and timespent has seen sequetial %WoW growth

	7/18-7/24	7/25-7/31	8/1-8/7	8/8-8/14	08/15-8/21
MAU (mn)	269	270	272	285	290
% WoW	0.6%	0.4%	0.5%	4.7%	1.8%
DAU (mn)	69	70	71	77	80
% WoW	0.4%	2.3%	0.6%	8.4%	4.8%
Timespent (mn min)	33,033	35,836	37,405	43,506	46,420
% WoW	-0.8%	8.5%	4.4%	16.3%	6.7%

2. Online advertising services revenue was Rmb1.2 billion, decreasing 35% yoy, primarily due to a challenging macro, Covid resurgence and a new strategy that led to a fewer number of variety shows launched.

Looking ahead, we believe iQIYI's ad revenue growth will remain under pressure due to headwinds from **1) Supply:** Covid-restrictions that could postpone production of some variety shows to 2H22, though we note content cost will also be pushed back alongside the ad revenue; **2)** brand advertising underperforming transaction-focused performance advertising amid weak macro, and **3)** tightened regulations on video ad formats as discussed in our prior note on the China internet regulation outlook.

Accordingly, we expect ad revenue to decline **-4%/-26% yoy to Rmb1.2bn/Rmb5.2bn** in 3Q22E/2022E.

3. Collaboration with Douyin: In July, iQIYI and Douyin (China's top1 SFV platform in

both DAU and timespent) reached a cooperation agreement. While providing copyrights to Douyin and allowing distribution and recreation of iQIYI's existing content, iQIYI enjoys an incremental traffic source and positive impact on revenue, profit and cash flow, which we expect to be observable (in content distribution segment) from 3Q22 with deeper collaboration in products, technology and daily operations.

4. Non-GAAP operating profit for the quarter reached 343.8mn, vs. Rmb779.4mn loss a year ago. Non-GAAP diluted EPADS for the quarter came in at **Rmb0.1**, primarily attributable to **1) better control of content cost** of Rmb3.9bn (down 24% yoy, accounting for 58% of revenues compared with 60% of revenues in 1Q22); **2) much lower GAAP SG&A expenses** at Rmb800.6mn, down 32% yoy, on lower marketing spending, personnel and share-based compensation expenses. R&D expenses decreased by 29% yoy as well.

Profitability improvement a long-term core focus, following the margin expansion strategy in 1Q22, management noted that the company has completed the strategy adjustment after two consecutive quarters with positive operating and net profits, and thus upgraded its 3Q strategy to 'Calm Growth', with emphasis on **1)**pursuing growth yet not through significant cash burn, actively investing in core businesses and projects with a higher certainty of outcome and ROI **2)** pursuing growth for both revenue and profit, and prioritizing profit growth by maintaining the lean operational structure and improving efficiency, and **3)** delivering greater value to customers with better premium content.

We forecast operating profit margin of 5.7%/5.2% in 3Q22E/2022E.

5. Agreement with PAG: iQIYI has announced a \$500mn Convertible Notes private placement with PAG which is expected to close in 4Q22.

Financials and valuation

On iQIYI, we trim our 2022-24E revenue forecasts by 0-2%, and revise our non-GAAP operating margin forecasts by +1.6pp/-0.1pp/-0.1pp, respectively, to reflect the better visibility into IQ's profitability thanks to management's better cost controls on content cost and SG&A expenses.

Consequently, we revise our 12m DCF-based valuation for iQIYI down by -10.5% to **US\$5.1** from US\$5.7 prior (based on 14% WACC derived from 3.5% risk-free rate, 7% equity market premium and beta of 1.5, and terminal growth rate of 3%, from prior terminal growth rate of 5%), implying 1.3x 2023E EV/Sales. Stay **Neutral**.

Exhibit 11: iQIYI 2022 results summary

iQIYI, Inc.								Act.		
Rmb mn	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	2Q22E	vs. Est	QoQ (%)	YoY (%)
Membership services	4,312	3,993	4,288	4,121	4,471	4,285	4,276	0%	-4%	7%
Online advertising services	1,917	1,825	1,660	1,665	1,337	1,194	1,055	13%	-11%	-35%
Content distribution	779	688	627	762	626	479	550	-13%	-23%	-30%
Others	961	1,102	1,013	842	842	698	782	-11%	-17%	-37%
Total revenues	7,968	7,608	7,589	7,389	7,277	6,657	6,663	0%	-9%	-13%
% yoy growth	4%	3%	6%	-1%	-9%	-13%	-12%			
Content cost	(5,400)	(5,100)	(5,300)	(4,900)	(4,400)	(3,900)	(4,060)	4%	11%	24%
as % of revenue	-67.8%	-67.0%	-69.8%	-66.3%	-60.5%	-58.6%	-60.9%			
Gross profit, GAAP	859	739	561	881	1313	1409	1255	12%	7%	91%
Gross profit, non-GAAP	905	782	601	919	1344	1437	1294	11%	7%	84%
Sales, G&A cost, GAAP	(1,201)	(1,185)	(1,246)	(1,093)	(745)	(801)	(778)	-3%	-7%	32%
Research and development, GAAP	(672)	(676)	(683)	(763)	(475)	(482)	(539)	11%	-2%	29%
Total operating expense, GAAP	(1,873)	(1,861)	(1,929)	(1,856)	(1,220)	(1,283)	(1,317)	3%	-5%	31%
Operating profit, GAAP	(1,014)	(1,122)	(1,368)	(975)	93	126	(62)	NM	35%	Nm
Operating profit, non-GAAP	(658)	(780)	(1,073)	(515)	327	344	227	51%	5%	NM
Profit before tax, GAAP	(1,237)	(1,348)	(1,698)	(1,729)	191	(165)	(349)	53%	NM	88%
Income tax expense	(21)	(30)	(9)	(37)	(17)	(36)	31	NM	-114%	-19%
Net (loss)/income, GAAP	(1,267)	(1,397)	(1,730)	(1,776)	169	(214)	(318)	33%	NM	85%
Net (loss)/income, non-GAAP	(1,021)	(1,065)	(1,400)	(1,002)	162	78	(45)	NM	-52%	Nm
Diluted EPADS, GAAP (Rmb)	(1.62)	(1.78)	(2.20)	(2.24)	0.20	(0.26)	(0.39)	32%	NM	85%
Diluted EPADS, non-GAAP (Rmb)	(1.29)	(1.34)	(1.75)	(1.25)	0.20	0.10	(0.05)	NM	-49%	Nm
Non-GAAP margins	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	2Q22E	Diff (pp)	QoQ (pp)	YoY (pp)
Gross margin	11.4%	10.3%	7.9%	12.4%	18.5%	21.6%	19.4%	2.2	3.1	11.3
Operating margin	-8.3%	-10.2%	-14.1%	-7.0%	4.5%	5.2%	3.4%	1.8	0.7	15.4
Net margin	-12.8%	-14.0%	-18.4%	-13.6%	2.2%	1.2%	-0.7%	1.8	(1.1)	15.2

Exhibit 12: Our forecast revisions for IQ

iQIYI	New		New		New	
Rmb mn	2022E	Diff.	2023E	Diff.	2024E	Diff.
Total revenues	28,974	0%	30,394	-2%	33,020	-2%
Net (loss)/income, non-GAAP	509	458%	1,120	11%	2,171	5%
Net margin, non-GAAP	1.8%	1.4	3.7%	0.4	6.6%	0.4

Source: Company data, Goldman Sachs Global Investment Research

31 August 2022

Exhibit 13: Our DCF-based 12M TP is down by 10.5% to US\$5.1

Discounted cash flow (Rmb mn)	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenues	30,554	28,974	30,394	33,020	35,175	37,185	39,249	41,351	43,536	45,784
% yoy	3%	-5%	5%	9%	7%	6%	6%	5%	5%	5%
Content cost (P&L)	(20,700)	(16,982)	(17,614)	(18,533)	(19,364)	(20,233)	(20,840)	(21,466)	(22, 109)	(22,773)
% of revenue	67.7%	58.6%	58.0%	56.1%	55.1%	54.4%	53.1%	51.9%	50.8%	49.7%
Operating income, GAAP	(4,479)	502	1,149	2,245	3,096	3,807	4,838	5,907	7,038	8,200
Operating income, non-GAAP	(3,027)	1,504	2,200	3,385	4,309	5,089	6,191	7,291	8,451	9,640
OPM, non-GAAP	-9.9%	5.2%	7.2%	10.3%	12.3%	13.7%	15.8%	17.6%	19.4%	21.1%
Tax	(97)	(99)	(100)	(200)	(250)	(296)	(509)	(662)	(822)	(978)
Operating income post tax, GAAP	(4,576)	403	1,049	2,045	2,846	3,511	4,328	5,245	6,216	7,221
Depreciation	400	401	407	437	493	635	659	688	715	739
Amortization	16,366	16,016	12,820	13,321	13,980	14,625	15,179	15,633	16,099	16,578
Share-based compensation	1,219	945	991	1,076	1,147	1,212	1,280	1,307	1,332	1,355
Gross cash flow	13,409	17,765	15,266	16,880	18,465	19,983	21,446	22,872	24,361	25,893
Less: Change in working capital (excl. content cost)	2,637	(1,567)	274	601	543	563	396	389	448	441
Less: Capital expenditure	(401)	(840)	(851)	(892)	(995)	(1,038)	(1,080)	(1,101)	(1,113)	(1,137)
Less: Acquisition of content licenses	(9,731)	(8,749)	(9,012)	(9,462)	(9,841)	(10,234)	(10,541)	(10,858)	(11, 183)	(11,519)
Less: Produced contents	(10,492)	(4,773)	(4,848)	(5, 139)	(5,448)	(5,775)	(5,948)	(6, 126)	(6,310)	(6,499)
Free cash flow	(4,578)	1,835	830	1,988	2,724	3,499	4,273	5,175	6,203	7,179
FCF margin	-15.0%	6.3%	2.7%	6.0%	7.7%	9.4%	10.9%	12.5%	14.2%	15.7%
% yoy change	-2%	140%	-55%	140%	37%	28%	22%	21%	20%	16%
Terminal value										67,220
Total FCF	(4,578)	1,835	830	1,988	2,724	3,499	4,273	5,175	6,203	74,399

DCF Summary	
WACC calculation	
Equity market premium	7.0%
Risk free rate	3.5%
Beta	1.5
Cost of equity	14.0%
Cost of debt	5.0%
Tax rate	15.0%
After-tax cost of debt	4.3%
Long-run debt-to-capital ratio	-
WACC	14.0%
Terminal growth rate	3.0%
Exit FCF multiple	9.1

DCF summary					
	23E end				
Firm value (Rmb mn)	39,305				
2023-30E FCF value	15,741				
Terminal value	23,565				
Net cash (Rmb mn)	(9,319)				
Equity value (Rmb mn)	29,987				
FX	6.70				
Equity value (US\$ mn)	4,476				
ADS outstanding (mn)	885				
Value per ADS (US\$)	5.1				

Disclosure Appendix

Reg AC

We, Lincoln Kong, CFA, Ronald Keung, CFA and Steve Qiu, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

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Growth is based on a stock's forward-looking sales growth, EBITDA growth and EPS growth (for financial stocks, only EPS and sales growth), with a higher percentile indicating a higher growth company. **Financial Returns** is based on a stock's forward-looking ROE, ROCE and CROCI (for financial stocks, only ROE), with a higher percentile indicating a company with higher financial returns. **Multiple** is based on a stock's forward-looking P/E, P/B, price/dividend (P/D), EV/EBITDA, EV/FCF and EV/Debt Adjusted Cash Flow (DACF) (for financial stocks, only P/E, P/B and P/D), with a higher percentile indicating a stock trading at a higher multiple. The **Integrated** percentile is calculated as the average of the Growth percentile, Financial Returns percentile and (100% - Multiple percentile).

Financial Returns and Multiple use the Goldman Sachs analyst forecasts at the fiscal year-end at least three quarters in the future. Growth uses inputs for the fiscal year at least seven quarters in the future compared with the year at least three quarters in the future (on a per-share basis for all metrics).

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Disclosures

The rating(s) for Baidu.com Inc. (ADR), Baidu.com Inc. (H) and iQIYI Inc. is/are relative to the other companies in its/their coverage universe: Baidu.com Inc. (ADR), Baidu.com Inc. (H), Bilibili Inc. (ADR), Bilibili Inc. (H), NetEase Inc. (ADR), NetEase Inc. (H), Zhihu Inc. (ADR), Zhihu Inc. (H), iQIYI Inc.

Company-specific regulatory disclosures

The following disclosures relate to relationships between The Goldman Sachs Group, Inc. (with its affiliates, "Goldman Sachs") and companies covered by the Global Investment Research Division of Goldman Sachs and referred to in this research.

Goldman Sachs has received compensation for investment banking services in the past 12 months: Baidu.com Inc. (ADR) (\$137.69), Baidu.com Inc. (H) (HK\$146.30) and iQIYI Inc. (\$3.55)

Goldman Sachs expects to receive or intends to seek compensation for investment banking services in the next 3 months: Baidu.com Inc. (ADR) (\$137.69), Baidu.com Inc. (H) (HK\$146.30) and iQIYI Inc. (\$3.55)

Goldman Sachs has received compensation for non-investment banking services during the past 12 months: Baidu.com Inc. (ADR) (\$137.69), Baidu.com Inc. (H) (HK\$146.30) and iQIYI Inc. (\$3.55)

Goldman Sachs had an investment banking services client relationship during the past 12 months with: Baidu.com Inc. (ADR) (\$137.69), Baidu.com Inc. (HK\$146.30) and iQIYI Inc. (\$3.55)

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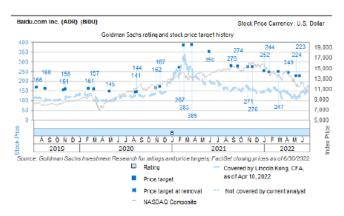
Distribution of ratings/investment banking relationships

Goldman Sachs Investment Research global Equity coverage universe

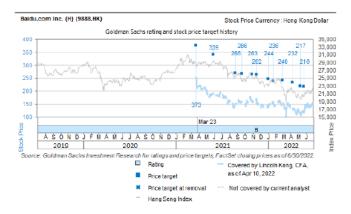
	Rating Distribution			Investment Banking Relationships		
	Buy	Hold	Sell	Buy	Hold	Sell
Global	50%	35%	15%	65%	58%	45%

As of July 1, 2022, Goldman Sachs Global Investment Research had investment ratings on 3,132 equity securities. Goldman Sachs assigns stocks as Buys and Sells on various regional Investment Lists; stocks not so assigned are deemed Neutral. Such assignments equate to Buy, Hold and Sell for the purposes of the above disclosure required by the FINRA Rules. See 'Ratings, Coverage universe and related definitions' below. The Investment Banking Relationships chart reflects the percentage of subject companies within each rating category for whom Goldman Sachs has provided investment banking services within the previous twelve months.

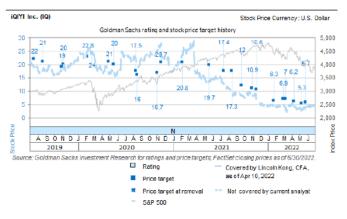
Price target and rating history chart(s)



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