

Baidu (BIDU US)

Core business recovery on track with more to expect on new initiatives

Baidu's core ads business is on track for recovery in January 2023 and we expect search ads demand will benefit from faster than expected offline activities recovery in 1Q23, evidenced by robust offline travel and commerce traffic since Chinese New Year. Search ads demand faced significant pressure due to offline activities disruptions in 2022, the faster than expected normalization would bring search ads demand back to normalized pace. Baidu has accumulated strong AI technological capability, and with improving core search ads business outlook in 2023, the progress in large scale monetization of ASD and earlier than expected breakeven of cloud business would serve as solid fundamentals support for its stock price. Our SOTP valuation derived target price is USD195.2 and we maintain BUY rating.

- Core ads business benefits more than other platforms from offline activities recovery.** Unlike other online ads platforms, Baidu has higher proportions of SME advertisers (~80% based on our estimate), whose demand were severely impacted by offline activities disruptions in 2022. Per Meituan, the daily average GTV on its platform increased 66% during the first six days of Spring Festival in 2023 compared to that in 2019. In addition, the daily average subway passenger volume in China's 10 large cities (Fig.1) in the first five days post 2023 CNY holiday has reached nearly full recovery compared to the same period in 2019 (Per Wind). Both data demonstrated offline activities recovery was faster than expected, which indicate Baidu's core ads business recovery could be faster than expected starting from 1Q23. The recent share price rally is actually backed by improving core search business outlook for 2023 (4Q22 preview report [Link](#)).
- Chat GPT helps on sentiment.** Baidu announced ([7 Feb](#)) that its ChatGPT like product "ERNIE Bot" will be launched soon. ChatGPT's main monetization ways include premium subscription model, and Model-as-a-services (MaaS) which could help business clients train models on cloud, enabling clients to improve operating efficiency. Leading Chinese AI Cloud computing providers all can offer such MaaS services, hence future market share on monetizing from business clients will depend on capturing high working efficiency requirement industries' AI cloud computing and SaaS services market share. Therefore, we expect material revenue contribution will still take time, but Baidu certainly is well positioned in terms of technology leadership in AI, big data and large language models, and applications.
- Monetization of new business is key valuation support.** Our SOTP based target price of US\$195.2 comprises: 1) US\$59.1 for Baidu Core (main business excluding Apollo and Baidu Cloud; 30% of total target valuation); 2) US\$22.5 for Apollo ASD (12% of total); 3) US\$40.4 for Baidu Cloud (21% of total), which includes large language models future revenue contribution in MaaS; 4) US\$60.3 net cash (31% of total); 5) US\$12.9 for iQIYI and other investments (7% of total). Recent strong stock price run has fairly reflected Baidu Core re-rating, taking into account of net cash and investments, we believe share price support centres on three aspects of Baidu's future development: 1) better than expected 2023 ads demand recovery; 2) sooner and greater than expected large scale monetization of ASD; and 3) earlier than expected breakeven of cloud business.

BUY (Maintain)

Target Price US\$195.20
Up/Downside 36.4%
Current Price US\$143.06

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Stock Data

Mkt Cap (US\$ mn)	50,824.6
Avg 3 mths t/o (US\$ mn)	117.1
52w High/Low (US\$)	167.35/76.57
Total Issued Shares (mn)	355.3

Source: FactSet

Shareholding Structure

Robin Yanhong Li	16.5%
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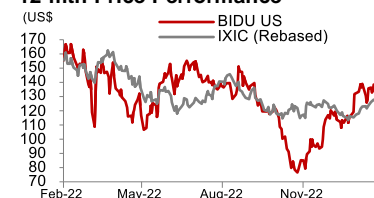
Source: HKEX

Share Performance

	Absolute	Relative
1-mth	7.5%	-5.4%
3-mth	67.9%	46.5%
6-mth	3.8%	9.4%

Source: FactSet

12-mth Price Performance



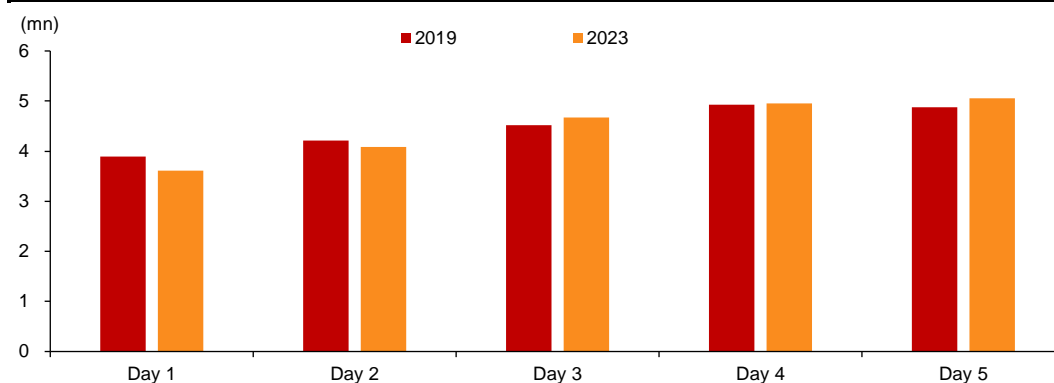
Source: FactSet

Earnings Summary

(YE 31 Dec)	FY20A	FY21A	FY22E	FY23E	FY24E
Revenue (RMB mn)	107,074	124,493	122,527	134,683	144,846
YoY growth (%)	(0.3)	16.3	(1.6)	9.9	7.5
Adjusted net profit (RMB mn)	22,020.0	18,830.0	20,341.5	22,041.4	24,192.7
EPS (Adjusted) (RMB)	63.93	53.53	57.26	61.43	66.76
Consensus EPS (RMB)	63.93	53.53	55.56	62.82	71.00
P/E (x)	13.1	42.3	58.5	22.0	19.5
ROE (%)	12.8	5.1	2.6	6.6	6.8

Source: Company data, Bloomberg, CMBIGM estimates

Figure 1: Daily average subway passenger volume in 10 large cities*



*post CNY holiday

Source: Wind, CMBIGM

Note: Ten large cities includes Beijing, Shanghai, Guangzhou, Shenzhen, Chengdu, Nanjing, Wuhan, Xi'an, Suzhou, and Zhengzhou.

Figure 2: Baidu ERNIE model



Source: Company data, CMBIGM

Figure 3: Baidu's digital host on Kuaishou platform



Source: Company data, CMBIGM

SOTP valuation of US\$195.2 per ADS

Our SOTP based target price is US\$195.2, which comprises, per ADS:

1) US\$59.1 for Baidu Core (main business, excluding Apollo and Baidu Cloud, mainly including the core search and feed ads business), based on 7.0x 2023E non-GAAP PE; recovery in advertising budget and sentiment could come along with the recovery in macro in 2023, in our view, and Baidu is poised to drive its ads business revenue back on growth track, aided by its enhanced mobile ecosystem, in our view. Also, Baidu has higher proportions of SME advertisers (~80% based on our estimate) as compared to other online ads platforms, and demand for these SME advertisers were severely impacted by offline activities disruptions in 2022, which also lays foundation for Baidu's search business recovery in 2023E. We forecast Baidu Core's ads revenue to grow 7% YoY in 2023E, following a 6.5% YoY drop in 2022.

2) US\$22.5 for Apollo ASD, based on 2.0x 2030E revenue, and discounted back using a 13.0% WACC.

3) US\$40.4 for Baidu Cloud, based on 4.8x 2023E PS; there could be rerating potential for Baidu's cloud business if: 1) in the short to medium term, YoY growth of cloud revenue recovers faster than expected aided by recovery in macro and Baidu's established competitive edge in verticals like smart transportation, manufacturing, energy & utilities and public services; 2) earlier than expected breakeven for cloud business; 3) development of ChatGPT is faster than expected, supported by Baidu's superior AI technological capability. The large language model could be widely applied to many verticals and industries that have demands for intensive customer services or dealing with standardized demand in the early stage of application, such as e-commerce, financial services, and standardized production.

However, as all leading Chinese AI Cloud providers can offer such MaaS services, the market share for ChatGPT related products and services will be determined by cloud market share. Therefore, we expect material revenue contribution will still take time, but Baidu certainly is well positioned in terms of technology leadership in AI, big data and large language models, and applications.

4) US\$60.3 net cash.

5) US\$12.9 for iQIYI and other investments.

Our target price translates into 22.0/20.2x 2023/2024E PE on non-GAAP basis, or 15.2/14.0x if excluding net cash. Overall, Baidu remains committed to drive for operating efficiency improvement. Combined with the top line recovery aided by solid ads business recovery and additional revenue generated from monetization of new business, Baidu could deliver better than market expected operating leverage in 2023E, in our view.

Figure 4: Baidu: SOTP valuation

Segment	NOPAT (US\$mn)	Valuation method/multiple	Valuation (RMBmn)	Valuation (US\$mn)	Baidu's stake	Valuation of Baidu's stake (US\$mn)	USD/ADS	Valuation as % of total (%)
Core business and cash								
1) Baidu core (ex-Apollo and Cloud)	3,030	7.0x 2023E PE	146,888	21,211	100.0	21,211	59.1	30.3
2) Apollo ASD			55,926	8,076	100.0	8,076	22.5	11.5
3) Baidu Cloud (ex-ASD)		4.8x 2023E PS	100,332	14,488	100.0	14,488	40.4	20.7
4) Net cash			149,911	21,648	100.0	21,648	60.3	30.9
Valuation of core business and cash						65,423	182.3	93.4
iQIYI and strategic investment								
1) iQIYI		Market value	35,715	5,157	51.5	2,656	7.4	
2) Trip.com group		Market value	161,032	23,254	10.8	2,511	7.0	
3) Uxin		Market value	816	118	9.1	11	0.0	

4) HAND Enterprise Solutions	Market value	7,881	1,138	5.3	60	0.2	
5) Kuaishou	Market value	277,822	40,119	3.1	1,246	3.5	
6) Yusys Technologies	Market value	15,260	2,204	5.1	113	0.3	
Valuation of iQIYI and investments					6,597	18.4	
Valuation of iQIYI and investment (with 30% holding discount)					4,618	12.9	
Total Baidu valuation (US\$mn)					70,042		6.6
Number of ADS outstanding (mn)					359		
Valuation per ADS (US\$)					195.2		

Source: Company data, CMBIGM estimates

Note: 1) American depositary share (ADS); iQIYI (IQ US); Trip.com Group (TCOM US); Uxin (UXIN US); HAND Enterprise solution (300170 SH); Kuaishou (1024 HK); Yusys Technologies (300674 SH).

Financial Summary

INCOME STATEMENT	2019A	2020A	2021A	2022E	2023E	2024E
YE 31 Dec (RMB mn)						
Revenue	107,413	107,074	124,493	122,527	134,683	144,846
Cost of goods sold	(62,850)	(55,158)	(64,314)	(64,101)	(69,365)	(73,620)
Gross profit	44,563	51,916	60,179	58,426	65,318	71,226
Operating expenses	(38,256)	(37,576)	(49,661)	(43,367)	(46,733)	(49,806)
SG&A expense	(19,910)	(18,063)	(24,723)	(20,070)	(21,684)	(23,175)
R&D expense	(18,346)	(19,513)	(24,938)	(23,297)	(25,049)	(26,631)
Operating profit	6,307	14,340	10,518	15,059	18,585	21,420
Share of (losses)/profits of associates/JV	(1,254)	(2,248)	(932)	(1,637)	(369)	(1)
Adjusted EBITDA	18,416	27,504	24,914	28,453	32,109	35,324
Net Interest income/(expense)	3,100	2,255	2,130	3,297	2,773	3,292
Foreign exchange gain/loss	(33)	(660)	100	(1,196)	0	0
Other income/expense	(8,460)	9,403	(1,038)	(7,470)	0	0
Pre-tax profit	(340)	23,090	10,778	8,053	20,989	24,711
Income tax	(1,948)	(4,064)	(3,187)	(2,571)	(5,000)	(6,309)
After tax profit	(2,288)	19,026	7,591	5,482	15,989	18,403
Minority interest	(4,345)	(3,446)	(2,635)	(293)	454	757
Net profit	2,057	22,472	10,226	5,775	15,535	17,646
Adjusted net profit	18,182	22,020	18,830	20,342	22,041	24,193
BALANCE SHEET	2019A	2020A	2021A	2022E	2023E	2024E
YE 31 Dec (RMB mn)						
Current assets	165,562	183,342	213,315	212,374	240,992	271,126
Cash & equivalents	33,443	35,782	36,850	36,756	63,102	91,252
Restricted cash	996	758	10,821	10,821	10,821	10,821
Account receivables	7,416	8,668	9,981	9,064	9,963	10,715
Other current assets	123,707	138,134	155,663	155,734	157,106	158,339
Non-current assets	135,754	149,366	166,719	156,168	153,867	151,276
PP&E	18,311	17,508	23,027	17,302	16,330	15,092
Intangibles	7,887	8,457	8,947	4,121	2,792	1,439
Goodwill	18,250	22,248	22,605	22,605	22,605	22,605
Other non-current assets	91,306	101,153	112,140	112,140	112,140	112,140
Total assets	301,316	332,708	380,034	368,542	394,859	422,402
Current liabilities	57,380	68,385	74,488	73,169	75,930	78,219
Short-term borrowings	2,618	3,016	4,168	4,168	4,168	4,168
Account payables	32,701	36,716	41,384	40,283	41,696	42,858
Other current liabilities	22,061	28,653	28,936	28,718	30,066	31,193
Non-current liabilities	71,121	72,480	81,594	66,504	65,773	64,220
Long-term borrowings	7,804	0	12,629	0	0	0
Bond payables	50,387	60,335	55,772	53,311	52,580	51,027
Obligations under finance leases	4,486	4,693	5,569	5,569	5,569	5,569
Deferred income	17	97	129	129	129	129
Other non-current liabilities	8,427	7,355	7,495	7,495	7,495	7,495
Total liabilities	128,501	140,865	156,082	139,673	141,703	142,439
Share capital	0	0	0	0	0	0
Capital surplus	38,714	47,213	47,548	47,883	48,218	48,553
Retained earnings	124,885	135,483	163,911	168,493	192,445	218,916
Other reserves	1,109	3,102	7,148	7,148	7,148	7,148
Total shareholders equity	164,708	185,798	218,607	223,524	247,811	274,617
Minority interest	8,107	6,045	5,345	5,345	5,345	5,345
Total equity and liabilities	301,316	332,708	380,034	368,541	394,859	422,402

CASH FLOW	2019A	2020A	2021A	2022E	2023E	2024E
YE 31 Dec (RMB mn)						
Operating						
Profit before taxation	(340)	23,090	10,778	8,053	20,989	24,711
Depreciation & amortization	19,161	18,180	16,438	5,126	4,946	4,685
Tax paid	(1,948)	(4,064)	(3,187)	(2,571)	(5,000)	(6,309)
Change in working capital	(6,687)	(18,207)	(18,691)	(472)	489	305
Others	18,272	5,201	14,784	7,182	7,280	7,384
Net cash from operations	28,458	24,200	20,122	17,318	28,704	30,777
Investing						
Capital expenditure	(6,428)	(5,084)	(10,896)	(3,180)	(2,515)	(1,989)
Acquisition of subsidiaries/ investments	(969)	(2,396)	(247)	0	0	0
Net proceeds from disposal of short-term investments	(476)	(486)	0	0	0	0
Others	(12,101)	(19,586)	(20,301)	(161)	(130)	(104)
Net cash from investing	(19,974)	(27,552)	(31,444)	(3,341)	(2,645)	(2,094)
Financing						
Net borrowings	771	12,390	8,840	(12,629)	0	0
Share repurchases	(4,958)	(13,054)	(7,581)	0	0	0
Others	314	6,329	22,137	(1,442)	288	(534)
Net cash from financing	(3,873)	5,665	23,396	(14,071)	288	(534)
Net change in cash						
Cash at the beginning of the year	29,827	34,439	36,540	47,671	47,577	73,923
Exchange difference	1	(212)	(943)	0	0	0
Cash at the end of the year	34,439	36,540	47,671	47,577	73,923	102,073
GROWTH	2019A	2020A	2021A	2022E	2023E	2024E
YE 31 Dec						
Revenue	5.0%	(0.3%)	16.3%	(1.6%)	9.9%	7.5%
Gross profit	(11.8%)	16.5%	15.9%	(2.9%)	11.8%	9.0%
Operating profit	(59.4%)	127.4%	(26.7%)	43.2%	23.4%	15.3%
Net profit	(92.5%)	992.5%	(54.5%)	(43.5%)	169.0%	13.6%
Adj. net profit	(24.2%)	21.1%	(14.5%)	8.0%	8.4%	9.8%
PROFITABILITY	2019A	2020A	2021A	2022E	2023E	2024E
YE 31 Dec						
Gross profit margin	41.5%	48.5%	48.3%	47.7%	48.5%	49.2%
Operating margin	5.9%	13.4%	8.4%	12.3%	13.8%	14.8%
Adj. net profit margin	16.9%	20.6%	15.1%	16.6%	16.4%	16.7%
Return on equity (ROE)	1.3%	12.8%	5.1%	2.6%	6.6%	6.8%
GEARING/LIQUIDITY/ACTIVITIES	2019A	2020A	2021A	2022E	2023E	2024E
YE 31 Dec						
Net debt to equity (x)	(0.5)	(0.5)	(0.5)	(0.5)	(0.6)	(0.7)
Current ratio (x)	2.9	2.7	2.9	2.9	3.2	3.5
Receivable turnover days	22.5	27.0	27.0	28.0	25.4	25.7
Payable turnover days	195.0	226.5	218.6	229.3	212.7	206.7
VALUATION	2019A	2020A	2021A	2022E	2023E	2024E
YE 31 Dec						
P/E	154.5	13.1	42.3	58.5	22.0	19.5
P/E (diluted)	154.8	13.2	43.2	59.7	22.4	19.9
P/B	1.9	1.6	2.0	1.5	1.4	1.3
P/CFPS	14.5	15.5	47.9	24.4	13.3	12.2

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

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