

Baidu (BIDU US)

Generative AI related revenue generation ramping up

Baidu announced its 3Q23 results on 21 Nov: revenue was RMB34.4bn, up 6% YoY, 1% higher than Bloomberg consensus estimates. Non-GAAP net income was RMB7.3bn, ahead of consensus estimates of RMB6.3bn, thanks to a beat in Baidu Core non-GAAP OP, aided by better-than-expected cost control in non-core business. Management noted that generative AI related cloud revenue has contributed low single digit percentage of total cloud revenue in 3Q23, and expects generative AI empowered new initiatives to bring hundreds of millions of incremental ads revenue in 4Q23. Although Baidu's ads revenue growth is still highly correlated with overall macro environment, the ramp up of generative AI related revenue likely propels better revenue growth outlook for Baidu, in our view. We fine-tune our SOTP-based TP to US\$195.6 (was US\$199.4). **BUY.**

■ **Generative AI feature is on track to revitalize Baidu's ads revenue growth.** Baidu Core revenue was up by 5% YoY to RMB26.6bn in 3Q23 (77% of total revenue), and was 1% better than consensus. In Sep 2023, MAUs of Baidu app were 663mn, up 5.0% YoY (3Q22: 5.0%). Baidu Core's online ads business revenue grew 5% YoY and 0.4% QoQ to RMB19.7bn in 3Q23. By incorporating generative AI, Baidu can help advertisers achieve higher conversions and ROI, which in return propels an evolution of ads monetization formats from cost per mile (CPM) to cost per click (CPC) and cost per sale (CPS), therefore showing potential to revitalizing ads revenue growth over mid-to-long term, in our view. We estimate 7.5% YoY revenue growth for Baidu Core ads business in 4Q23.

■ **Cloud business revenue growth to bottom out.** Non-ad revenue was up 6% YoY to RMB6.9bn and accounted for 26.0% of Baidu Core revenue (3Q22: 25.9%). Baidu Cloud revenue declined by 2% YoY to RMB4.4bn in 3Q23 (2Q23: +5%; 3Q22: +24%), mainly due to: 1) a relatively high base for smart transportation (ST) projects; and 2) soft macro and Baidu's strategic move to focus on quality projects. But the cloud business segment sustained non-GAAP operating profitability. Management is confident that cloud revenue growth will return to positive in 4Q23, as high base effect for ST vertical will wear off, and generative AI related cloud revenue may continue to ramp up. We forecast revenue from Baidu Cloud to grow 10% YoY in 4Q23.

■ **Expecting a relatively stable margin profile for Baidu Core in 4Q23/2024E.** Baidu's GPM was 52.7% in 3Q23, up 2.7pp YoY. Non-GAAP OPM for Baidu Core was 25.1%, better than Bloomberg consensus at 22.6%, thanks to better-than-expected cost control of mature businesses. Although the ramp up of monetization of generative AI related initiatives likely brings additional costs, and increase in revenue contribution from relatively low margin cloud business likely weighs on margins, we expect Baidu Core to maintain a relatively stable margin profile by implementing stringent cost control of non-core businesses. We forecast Baidu Core non-GAAP OPM to reach 20.0%/22.9% in 4Q23/2024E (4Q22/2023E: 21.4%/23.2%).

Earnings Summary

(YE 31 Dec)	FY21A	FY22A	FY23E	FY24E	FY25E
Revenue (RMB mn)	124,493	123,675	135,046	147,945	164,443
YoY growth (%)	16.3	(0.7)	9.2	9.6	11.2
Adjusted net profit (RMB mn)	18,830.0	20,680.0	26,844.9	27,111.8	31,679.4
EPS (Adjusted) (RMB)	53.53	58.90	75.70	75.69	87.57
Consensus EPS (RMB)	na	na	72.95	73.96	82.11
P/E (x)	42.3	40.1	13.1	13.8	11.7
ROE (%)	5.1	3.4	8.8	7.5	8.0

Source: Company data, Bloomberg, CMBIGM estimates

BUY (Maintain)

Target Price **US\$195.60**

(Previous TP) **US\$199.40)**

Up/Downside **72.5%**

Current Price **US\$113.42**

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Stock Data

Mkt Cap (US\$ mn)	39,824.6
Avg 3 mths t/o (US\$ mn)	98.1
52w High/Low (US\$)	160.22/93.36
Total Issued Shares (mn)	351.1
Source: FactSet	

Shareholding Structure

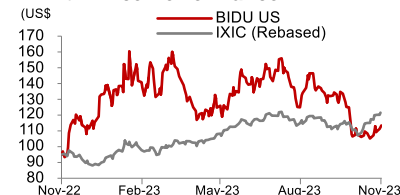
Robin Yanhong Li	16.5%
Source: HKEx	

Share Performance

	Absolute	Relative
1-mth	6.5%	-3.2%
3-mth	-11.6%	-16.5%
6-mth	-9.9%	-19.8%

Source: FactSet

12-mth Price Performance



Source: FactSet

Figure 1: Baidu: quarterly financial results

(RMBbn)	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	3Q23 Consensus	Diff%
Baidu Group									
Online marketing	16.9	18.3	19.9	19.6	18.0	21.1	21.3	21.2	0.9%
YoY growth (%)	-6.4%	-12.3%	-5.3%	-5.6%	6.2%	15.4%	7.0%		
Other services	11.5	11.4	12.6	13.5	13.2	13.0	13.1	12.9	1.4%
YoY growth (%)	14.4%	8.1%	15.9%	9.2%	14.7%	14.0%	4.0%		
Total revenue	28.4	29.6	32.5	33.1	31.1	34.1	34.4	34.2	0.7%
YoY growth (%)	1.0%	-5.4%	1.9%	0.0%	9.6%	14.9%	5.9%		
Gross profit	12.9	14.5	16.3	16.1	16.0	17.9	18.2	18.2	0.0%
Operating profit	2.6	3.4	5.3	4.6	5.0	5.2	6.3	6.9	-8.8%
Non-GAAP net profit	3.9	5.5	5.9	5.4	5.7	8.0	7.3	6.3	15.8%
YoY growth (%)	-10%	3%	16%	32%	48%	44%	23%		
GPM (%)	45.3%	48.8%	50.0%	48.8%	51.3%	52.5%	52.7%	53.1%	-0.4 ppt
OPM (%)	9.2%	11.5%	16.3%	13.9%	16.0%	15.3%	18.2%	20.1%	-1.9 ppt
Non-GAAP NPM (%)	13.7%	18.7%	18.1%	16.2%	18.4%	23.5%	21.1%	18.4%	2.7 ppt
Baidu Core									
Revenue	21.4	23.2	25.2	25.7	23.0	26.4	26.6	26.4	0.8%
YoY growth (%)	4.4%	-3.7%	2.3%	-1.2%	7.6%	14.0%	5.3%		
Baidu Core - online marketing	15.6	17.1	18.7	18.0	16.6	19.6	19.7	19.6	0.4%
YoY growth (%)	-3.6%	-10.1%	-3.6%	-5.5%	6.3%	14.7%	5.2%		
Baidu Core - Others	5.8	6.1	6.5	7.6	6.4	6.8	6.9	6.9	0.5%
YoY growth (%)	34.4%	20.8%	24.1%	10.4%	11.1%	12.1%	5.5%		
Non-GAAP OP	3.7	5.1	6.7	5.5	5.4	6.5	6.7	6.0	12.0%
Non-GAAP NP	3.8	5.4	5.8	4.9	5.3	7.7	7.0	5.6	24.2%
YoY growth (%)	-21.9%	-8.3%	-1.5%	6.3%	38.5%	41.2%	20.6%		
Non-GAAP OPM (%)	17.2%	22.1%	26.4%	21.4%	23.3%	24.7%	25.1%	22.6%	2.5 ppt
Non-GAAP NPM (%)	17.8%	23.5%	22.8%	19.2%	22.9%	29.1%	26.2%	21.2%	4.9 ppt

Source: Company data, Bloomberg, CMBIGM

Changes in forecast and valuation

Figure 2: Baidu forecast revision

RMB bn	Current			Previous			Change (%)		
	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E
Revenue	135.0	147.9	164.4	136.2	148.0	163.8	-0.9%	-0.1%	0.4%
Gross Profit	69.7	77.0	87.5	69.4	75.2	85.1	0.5%	2.3%	2.9%
Non-GAAP net profit	26.8	27.1	31.7	25.6	25.6	29.6	5.0%	5.8%	7.1%
Gross Margin	51.6%	52.0%	53.2%	50.9%	50.8%	51.9%	0.7 ppt	1.2 ppt	1.3 ppt
Non-GAAP net margin	19.9%	18.3%	19.3%	18.8%	17.3%	18.1%	1.1 ppt	1.0 ppt	1.2 ppt

Source: CMBIGM estimates

Figure 3: Baidu Core business segment forecast revision

RMB bn	Current			Previous			Change (%)		
	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E
Revenue	103.6	114.0	129.2	104.4	113.6	128.2	-0.8%	0.3%	0.8%
Non-GAAP Operating Profit	24.1	26.1	31.0	23.7	24.8	28.9	1.6%	5.0%	7.2%
Non-GAAP net profit	25.2	25.1	29.3	24.0	23.7	27.2	5.0%	5.8%	7.6%
Non-GAAP OPM	17.8%	17.6%	18.8%	17.4%	16.8%	17.6%	0.4 ppt	0.8 ppt	1.2 ppt
Non-GAAP NPM	18.7%	16.9%	17.8%	17.6%	16.0%	16.6%	1.1 ppt	0.9 ppt	1.2 ppt

Source: CMBIGM estimates

SOTP valuation of US\$195.6 per ADS

Our SOTP-based target price is US\$195.6, which comprises, per ADS:

- 1) US\$69.2 (prior US\$68.5) for Baidu Core (main business, excluding Apollo and Baidu Cloud, mainly including the core search and feed ads business), based on unchanged 7.0x 2023E non-GAAP PE. The lift in valuation is mainly due to a lift in non-GAAP net income forecast.
- 2) US\$21.9 (prior US\$22.8) for Apollo ASD, based on 2.0x 2030E revenue, and discounted back using a 13.0% WACC.
- 3) US\$35.3 (prior US\$36.9) for Baidu Cloud, based on unchanged 4.8x 2023E PS.
- 4) US\$56.6 net cash (prior US\$58.2).
- 5) US\$12.6 (prior US\$13.0) for iQIYI and other investments, with a 30% holding discount applied to the share price of US\$18.0 as of market close on 22 Nov 2023.

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)	3,507	7.0x 2023E PE	176,748	24,548	100.0	24,548	69.2	35.4
2) Apollo ASD			55,926	7,767	100.0	7,767	21.9	11.2
3) Baidu Cloud (ex-ASD)		4.8x 2023E PS	90,046	12,506	100.0	12,506	35.3	18.0
4) Net cash			144,618	20,086	100.0	20,086	56.6	29.0
Valuation of core business and cash						64,908	183.0	93.6
iQIYI and strategic investment								
1) iQIYI		Market value	34,992	4,860	51.5	2,503	7.1	
2) Trip.com group		Market value	176,991	24,582	10.8	2,655	7.5	
3) Uxin		Market value	393	55	9.1	5	0.0	
4) HAND Enterprise Solutions		Market value	9,430	1,310	5.3	69	0.2	
5) Kuaishou		Market value	241,692	33,568	3.1	1,043	2.9	
6) Yusys Technologies		Market value	15,260	2,119	5.1	109	0.3	
Valuation of iQIYI and investments						6,383	18.0	

Valuation of iQIYI and investment (with 30% holding discount)	4,468	12.6	6.4
Total Baidu valuation (US\$mn)	69,376		
Number of ADS outstanding (mn)	355		
Valuation per ADS (US\$)	195.6		

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); 2) data as of 22 Nov 2023 market close; 3) we fine-tuned exchange rate assumption from RMB:USD = 1:6.925 to RMB:USD = 1:7.2

Our target price translates into 18.6/18.6x 2023/2024E PE on non-GAAP basis, or 13.2/13.2x if excluding net cash.

Financial Summary

INCOME STATEMENT	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec (RMB mn)						
Revenue	107,074	124,493	123,675	135,046	147,945	164,443
Cost of goods sold	(55,158)	(64,314)	(63,935)	(65,322)	(70,959)	(76,942)
Gross profit	51,916	60,179	59,740	69,725	76,986	87,501
Operating expenses	(37,576)	(49,661)	(43,829)	(48,473)	(52,714)	(57,975)
SG&A expense	(18,063)	(24,723)	(20,514)	(24,038)	(26,778)	(29,764)
R&D expense	(19,513)	(24,938)	(23,315)	(24,434)	(25,936)	(28,210)
Operating profit	14,340	10,518	15,911	21,252	24,273	29,526
Share of (losses)/profits of associates/JV	(2,248)	(932)	(1,910)	(1,221)	(1,084)	(965)
Adjusted EBITDA	27,504	24,914	29,663	34,623	38,019	44,157
Net Interest income/(expense)	2,255	2,130	3,332	4,540	3,154	3,442
Foreign exchange gain/loss	(660)	100	(1,484)	1,044	835	668
Other income/expense	9,403	(1,038)	(5,737)	2,183	2,205	2,227
Pre-tax profit	23,090	10,778	10,112	27,799	29,382	34,898
Income tax	(4,064)	(3,187)	(2,578)	(5,155)	(7,197)	(8,406)
After tax profit	19,026	7,591	7,534	22,643	22,185	26,491
Minority interest	(3,446)	(2,635)	(25)	958	1,431	1,697
Net profit	22,472	10,226	7,559	21,685	20,754	24,795
Adjusted net profit	22,020	18,830	20,680	26,845	27,112	31,679
BALANCE SHEET	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec (RMB mn)						
Current assets	183,342	213,315	212,850	238,994	269,371	304,444
Cash & equivalents	35,782	36,850	53,156	79,820	107,841	139,917
Restricted cash	758	10,821	11,330	11,330	11,330	11,330
Account receivables	8,668	9,981	11,733	9,990	10,944	12,164
Other current assets	138,134	155,663	136,631	137,854	139,256	141,033
Non-current assets	149,366	166,719	178,123	176,864	179,512	182,228
PP&E	17,508	23,027	23,973	28,017	32,018	36,109
Intangibles	8,457	8,947	8,095	2,792	1,439	64
Goodwill	22,248	22,605	22,477	22,477	22,477	22,477
Other non-current assets	101,153	112,140	123,578	123,578	123,578	123,578
Total assets	332,708	380,034	390,973	415,858	448,883	486,672
Current liabilities	68,385	74,488	79,630	84,637	87,979	90,566
Short-term borrowings	3,016	4,168	5,343	5,343	5,343	5,343
Account payables	36,716	41,384	38,014	41,809	43,775	44,602
Other current liabilities	28,653	28,936	36,273	37,486	38,861	40,620
Non-current liabilities	72,480	81,594	73,538	65,480	64,355	63,823
Long-term borrowings	0	12,629	13,722	0	0	0
Bond payables	60,335	55,772	49,461	55,125	54,000	53,468
Obligations under finance leases	4,693	5,569	4,810	4,810	4,810	4,810
Deferred income	97	129	159	159	159	159
Other non-current liabilities	7,355	7,495	5,386	5,386	5,386	5,386
Total liabilities	140,865	156,082	153,168	150,117	152,334	154,388
Share capital	0	0	0	0	0	0
Capital surplus	47,213	47,548	47,748	47,948	48,148	48,348
Retained earnings	135,483	163,911	175,730	203,465	234,074	269,609
Other reserves	3,102	7,148	8,393	8,393	8,393	8,393
Total shareholders equity	185,798	218,607	231,871	259,806	290,615	326,350
Minority interest	6,045	5,345	5,934	5,934	5,934	5,934
Total equity and liabilities	332,708	380,034	390,973	415,858	448,883	486,672

CASH FLOW	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec (RMB mn)						
Operating						
Profit before taxation	23,090	10,778	10,112	27,799	29,382	34,898
Depreciation & amortization	18,180	16,438	14,725	5,700	5,742	5,654
Tax paid	(4,064)	(3,187)	(2,578)	(5,155)	(7,197)	(8,406)
Change in working capital	(18,207)	(18,691)	(16,758)	5,528	986	(411)
Others	5,201	14,784	20,669	7,089	7,196	7,817
Net cash from operations	24,200	20,122	26,170	40,961	36,109	39,551
Investing						
Capital expenditure	(5,084)	(10,896)	(8,286)	(8,286)	(8,286)	(8,286)
Acquisition of subsidiaries/ investments	(2,396)	(247)	(14)	0	0	0
Net proceeds from disposal of short-term investments	(486)	0	0	0	0	0
Others	(19,586)	(20,301)	4,356	(130)	(104)	(84)
Net cash from investing	(27,552)	(31,444)	(3,944)	(8,416)	(8,390)	(8,370)
Financing						
Net borrowings	12,390	8,840	(6,813)	(13,722)	0	0
Share repurchases	(13,054)	(7,581)	(1,925)	0	0	0
Others	6,329	22,137	2,348	7,091	302	895
Net cash from financing	5,665	23,396	(6,390)	(6,631)	302	895
Net change in cash						
Cash at the beginning of the year	34,439	36,540	47,671	65,236	91,150	119,171
Exchange difference	(212)	(943)	1,729	0	0	0
Cash at the end of the year	36,540	47,671	65,236	91,150	119,171	151,247
GROWTH	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec						
Revenue	(0.3%)	16.3%	(0.7%)	9.2%	9.6%	11.2%
Gross profit	16.5%	15.9%	(0.7%)	16.7%	10.4%	13.7%
Operating profit	127.4%	(26.7%)	51.3%	33.6%	14.2%	21.6%
Net profit	992.5%	(54.5%)	(26.1%)	186.9%	(4.3%)	19.5%
Adj. net profit	21.1%	(14.5%)	9.8%	29.8%	1.0%	16.8%
PROFITABILITY	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec						
Gross profit margin	48.5%	48.3%	48.3%	51.6%	52.0%	53.2%
Operating margin	13.4%	8.4%	12.9%	15.7%	16.4%	18.0%
Adj. net profit margin	20.6%	15.1%	16.7%	19.9%	18.3%	19.3%
Return on equity (ROE)	12.8%	5.1%	3.4%	8.8%	7.5%	8.0%
GEARING/LIQUIDITY/ACTIVITIES	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec						
Net debt to equity (x)	(0.5)	(0.5)	(0.5)	(0.6)	(0.6)	(0.6)
Current ratio (x)	2.7	2.9	2.7	2.8	3.1	3.4
Receivable turnover days	27.0	27.0	31.6	29.0	25.5	25.3
Payable turnover days	226.5	218.6	223.5	220.0	217.1	206.8
VALUATION	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec						
P/E	13.1	42.3	40.1	13.1	13.8	11.7
P/E (diluted)	13.2	43.2	40.5	13.2	14.0	11.8
P/B	1.6	2.0	1.3	1.1	1.0	0.9
P/CFPS	15.5	47.9	17.1	8.8	10.4	9.4

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

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