China / Hong Kong Company Update

Baidu Inc (HK)

Bloomberg: 9888 HK Equity | BIDU US EQUITY | Reuters: 9888.HK | BIDU.OQ

Refer to important disclosures at the end of this report

DBS Group Research . Equity

20 Oct 2023

HK: BUY

Last Traded Price (19 Oct 2023):HK\$107.70(HSI: 17,296)
Price Target 12-mth: HK\$186 (72.7% upside) (Prev HK\$204)

US: BUY

Last Traded Price (19 Oct 2023):US\$107.86(NASDAQ : 13,186)
Price Target 12-mth: US\$188 (74.3% upside) (Prev US\$206)

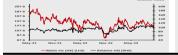
Analyst

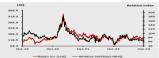
Tsz Wang Tam +852 36684195 tszwangtam@dbs.com Lilian Lv lilianlv@dbs.com

What's New

- Weaker ad spending from e-commerce platforms due to macro uncertainties
- Expect online marketing revenue to grow only 3% y-o-y in 3Q23, vs. previous market expectations of 8%
- Revised down FY23/FY24/FY25F non-GAAP earnings by 9%/3%/2% accordingly on slower ad growth and higher R&D
- Despite slower 3Q23 growth, expect online marketing revenue growth to pick up in 4Q thanks to shopping festival season, and cloud revenue growth to reaccelerate after launch of Ernie 4.0. Maintain BUY







Forecasts and Valuation (H Shares)

FY Dec (RMBm)	2022A	2023F	2024F	2025F
Turnover	123.675	134.241	147.407	161.188
EBITDA	13,724	22,210	26,059	29,369
Pre-tax Profit	10,112	18,710	22,559	25,869
Net Profit	7,509	15,160	19,009	22,320
Core profit	20,680	25,960	29,809	33,120
Core Profit Gth (Pre-ex)	9.8	25.5	14.8	11.1
EPS (RMB)	2.70	5.45	6.83	8.02
EPS (HK\$)	2.89	5.83	7.31	8.59
EPS Gth (%)	(27.2)	101.9	25.4	17.4
Diluted EPS (HK\$)	2.86	5.78	7.24	8.50
DPS (HK\$)	0.00	0.00	0.00	0.00
BV Per Share (HK\$)	85.51	93.91	103.78	114.92
PE (X)	37.3	18.5	14.7	12.5
P/Cash Flow (X)	10.7	10.9	9.5	8.5
P/Free CF (X)	15.7	16.1	13.2	11.4
EV/EBITDA (X)	14.0	7.6	5.5	3.9
Net Div Yield (%)	0.0	0.0	0.0	0.0
P/Book Value (X)	1.3	1.1	1.0	0.9
Net Debt/Equity (X)	CASH	CASH	CASH	CASH
ROAE(%)	3.5	6.5	7.4	7.8
Core Earnings Rev (%):		(9)	(3)	(2)
Consensus EPS (RMB)		8.55	8.80	9.97
Other Broker Recs:		B:33	S:0	H:1
Source of all data on this po	age: Compan	v, DBS Bank	(Hong Kong,) Limited

China's 'ChatGPT' to start the journey

Investment Thesis

Leading AI cloud player in China with c.30% market share. We forecast Baidu's cloud revenue will grow at a CAGR of 14% in FY22-FY25F. The cloud business thrives on growing demand for enterprise cloud services and subscription-based personal cloud driven by generative AI product adoption.

Baidu app contributing steady ad revenue. Baidu has dominated the search engine market for years, and the Baidu app continues to generate ad income via its search function and feeds, supported by various new features, including Baijiahao, mini programmes, and Managed Page. We expect Baidu Core's ad revenue to resume 8% growth in FY23F after a 6% decline in FY22, driven by the recovery of ad demand in offline verticals.

Monetisation upside from autonomous driving and Al capability. Baidu is a leading player in the autonomous driving market. Its current products include Robotaxi, Apollo Self Driving (ASD) system, etc. We expect its ASD system and products to generate a 19% CAGR over the next three years. We have not fully factored the growth potential of Robotaxi into our forecast, as it is still at the early stage of commercialisation. In addition, Baidu launched its Al chatbot project 'Ernie bot' for trial earlier this year, with the large-scale rollout awaiting government approval. The stepped up commercialisation of Ernie bot could potentially unlock value for Baidu. Benchmarking OpenAl's valuation of US\$29bn, Ernie bot could potentially bring in c.HK\$98 per share to Baidu. Any further penetration of ASD, Robotaxi, as well as the Ernie bot, should contribute to the valuation rerating.

We recommend BUY on Baidu with TPs of HK\$186/US\$188 per share (vs. previous TPs of HK\$204/US\$206). We derive our H-share TP based on SOTP valuation: (1) Baidu Core: 12x on FY24F non-GAAP net profit (HK\$141); (2) cloud and autonomous driving: 3x FY24F P/S (HK\$26); and (3) market value of major listed investees (HK\$20). Potential share price catalysts include (1) stronger-than-expected ad demand recovery and (2) faster-than-expected scaling up of the monetisation process via autonomous driving and launch of related technologies.

Key Risks

(1) Macro slowdown, which negatively affects online advertising revenue, and (2) product execution risk in monetising its Al capability.

At A Glance

Issued Capital (m shrs)	2,797
Mkt Cap (HKm/US\$m)	301,237 / 38,503
Major Shareholders (%)	
NIL	
Free Float (%)	100.0
3m Avg. Daily Val. (US\$m)	102.8
GICS Industry: Information Technolog	v / Software & Services



("DBS HK"), Thomson Reuters



WHAT'S NEW

Weaker 3Q23 performance due to slower online ad spending and soft cloud demand

3Q23 outlook and preview

We expect Baidu to deliver revenue growth of 3% y-o-y in 3Q23, below previous market expectations of 8% y-o-y. The downward revision was largely due to slower growth of 3% y-o-y (vs. 15% y-o-y in 2Q23) in Baidu Core's online marketing revenue. Ad spending across major e-commerce platforms was weaker than expected in the off-peak season, and ad demand from franchise activities slowed down due to macro uncertainties. Currently, the top ad verticals are e-commerce, healthcare, and travel, which accounted for around 10%, 10%, and <5% of Baidu Core's online marketing revenue, respectively.

In terms of cloud revenue growth, which accounted for approximately 13% of total revenue in 2Q23, its performance was weaker than expected due to slower progress in smart transportation and government-related projects. Specifically, the government-related smart transportation cloud segment experienced a significant vo-y decline of around 70% due to budget restrictions, representing a low-single-digit percentage of total revenue (compared to low teens in 3Q22). On the other hand, personal cloud products (Baidu Wangpan, Baidu Wenku) are expected to see double-digit revenue growth as more Al products and functions have been launched for customers use since August 2023. Among the cloud business segments, enterprise cloud and personal cloud accounted for c.60% and 30% of total revenue, respectively.

We expect Baidu Core's non-GAAP operating margin to stand at 22% in 3Q23, vs. 3Q22's 26%. The lower margin was ascribed to (1) investment in R&D (mainly Al-related products); (2) incremental marketing expenses for the launch of its Al products, such as Ernie 4.0; as well as (3) the stock-up of Al chips. We expect Baidu Core's non-GAAP operating margin to stay stable y-o-y in 4Q23, as a larger revenue contribution from the high-margin online ad segment can partially offset an increase in investment on Al development.

Expect 4Q23 ad growth to accelerate to 9% during shopping festival season

Looking ahead, we expect online ad revenue to resume to 9% y-o-y growth in 4Q23, given more online shopping festivals in 4Q, which should boost e-commerce platforms' ad spending on Baidu. Besides, other key verticals like healthcare and travel agency marketing demand remain resilient and continue to drive segment growth. We expect cloud revenue growth to steadily pick up to 7% in 4Q23, thanks to the launch of Ernie 4.0, which drives personal cloud growth the most. We expect personal cloud to sustain double-digit growth in 4Q23, while it will take some time for enterprise cloud to grow, as corporates are just starting to adopt generative Al products.

Earnings revision and recommendation

We revised down our earnings by 9%, 3%, and 2% for FY23F, FY24F, and FY25F, respectively, factoring in slower ad revenue growth and increased R&D investment to Al development. We expect non-GAAP net earnings to increase by 26%, 15%, and 11% for FY23F, FY24F, and FY25F, respectively. We are confident that Baidu's Al development will gradually translate into higher ad ROI and, therefore, higher ad revenue in the next few quarters, despite macro challenges. Its cloud growth will also start compensating for the relatively short-term softness in online ad. Maintain BUY on Baidu with TPs of HK\$186/US\$188 per share. We derive our TPs based on SOTP valuation: (1) Baidu Core: 12x on FY24F non-GAAP net profit (HK\$141); (2) cloud and autonomous driving; 3x FY24F P/S (HK\$26) and (3) market value of major listed investees (HK\$20).

Company Background

Established in 2000 and listed in 2005, Baidu is China's largest search platform in terms of mobile search traffic. In 2010, the company expanded into the online video segment by establishing iQiyi, China's largest online video platform in terms of monthly active users (MAUs). Baidu Core and iQiyi accounted for 72% and 28% of the company's FY20 revenue, respectively. The company's co-founder Robin Yanhong Li (李彦宏) is also its chairman and CEO.





Income Statement (RMB m)

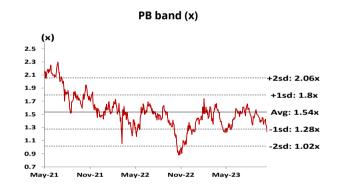
FY Dec	2022A	2023F	% chg vov
Revenue	123,675	134,241	8.5
Cost of Goods Sold	(63,935)	(63,630)	(0.5)
Gross Profit	59,740	70,611	18.2
Other Opng (Exp)/Inc	(43,829)	(49,401)	12.7
Operating Profit	15,911	21,210	33.3
Other Non Opg (Exp)/Inc	(7,221)	(5,000)	30.8
Associates & JV Inc	(1,910)	(500)	73.8
Net Interest (Exp)/Inc	3,332	3,000	(10.0)
Exceptional Gain/(Loss)	0	0	nm
Pre-tax Profit	10,112	18,710	85.0
Tax	(2,578)	(3,500)	35.8
Minority Interest	(25)	(50)	(100.0)
Net Profit	7,509	15,160	101.9
Net Profit before Except.	7,509	15,160	101.9
EBITDA	13,724	22,210	61.8
Margins & Ratio			
Gross Margins (%)	48.3	52.6	
Opg Profit Margin (%)	12.9	15.8	
Net Profit Margin (%)	6.1	11.3	

Source: Company, DBS HK

Historical PE and PB band

Forward PE band (x) 57.2 (x) 52.2 +2sd: 51.9x 42.2 37.2 -2.2 27.2 22.2 17.2 -1.5d: 19.1x May-21 Nov-21 May-22 Nov-22 May-23 Forward PE band (x) +2sd: 51.9x +1sd: 41x -1sd: 19.1x -2sd: 8.1x









Key Assumptions

FY Dec	2021A	2022A	2023F	2024F	2025F
Baidu app MAU (m)	622.0	648.0	686.9	721.2	750.1
iQiyi MAU (m)	96.8	111.6	122.8	125.2	127.7
Source: Company, DBS HK					

Segmental Breakdown (RMB m)

FY Dec	2021A	2022A	2023F	2024F	2025F
Revenues (RMB m)					
Baidu core	95,163	95,431	102,330	112,918	124,215
iQiyi	30,554	28,998	32,911	35,489	37,973
Others	(1,224)	(754)	(1,000)	(1,000)	(1,000)
Total	124,493	123,675	134,241	147,407	161,188

Source: Company, DBS HK

Income Statement (RMB m)

FY Dec	2021A	2022A	2023F	2024F	2025F
Revenue	124,493	123,675	134,241	147,407	161,188
Cost of Goods Sold	(64,314)	(63,935)	(63,630)	(69,723)	(76,081)
Gross Profit	60,179	59,740	70,611	77,683	85,107
Other Opng (Exp)/Inc	(49,661)	(43,829)	(49,401)	(52,624)	(56,738)
Operating Profit	10,518	15,911	21,210	25,059	28,369
Other Non Opg (Exp)/Inc	(938)	(7,221)	(5,000)	(5,000)	(5,000)
Associates & JV Inc	(932)	(1,910)	(500)	(500)	(500)
Net Interest (Exp)/Inc	2,130	3,332	3,000	3,000	3,000
Dividend Income	0	0	0	0	0
Exceptional Gain/(Loss)	0	0	0	0	0
Pre-tax Profit	10,778	10,112	18,710	22,559	25,869
Tax	(3,187)	(2,578)	(3,500)	(3,500)	(3,499)
Minority Interest	2,635	(25)	(50)	(50)	(50)
Preference Dividend	0	0	0	0	0
Net Profit	10,226	7,509	15,160	19,009	22,320
Net Profit before Except.	10,226	7,509	15,160	19,009	22,320
EBITDA	14,833	13,724	22,210	26,059	29,369
Growth					
Revenue Gth (%)	16.3	(0.7)	8.5	9.8	9.3
EBITDA Gth (%)	(45.6)	(7.5)	61.8	17.3	12.7
Opg Profit Gth (%)	(26.7)	51.3	33.3	18.1	13.2
Net Profit Gth (%)	(54.5)	(26.6)	101.9	25.4	17.4
Margins & Ratio					
Gross Margins (%)	48.3	48.3	52.6	52.7	52.8
Opg Profit Margin (%)	8.4	12.9	15.8	17.0	17.6
Net Profit Margin (%)	8.2	6.1	11.3	12.9	13.8
ROAE (%)	5.2	3.5	6.5	7.4	7.8
ROA (%)	2.9	1.9	3.8	4.5	5.0
ROCE (%)	2.5	3.6	5.0	5.8	6.2
Div Payout Ratio (%)	0.0	0.0	0.0	0.0	0.0
Net Interest Cover (x)	NM	NM	NM	NM	NM
Source: Company, DBS HK					





Balance Sheet (RMB m)

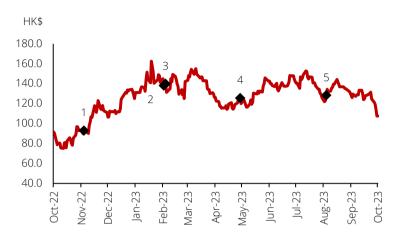
FY Dec	2021A	2022A	2023F	2024F	2025F
	·	·	- 		
Net Fixed Assets	23,027	23,973	26,259	28,545	30,831
Invts in Associates & JVs	0	0	0	0	0
Other LT Assets	143,692	154,150	145,650	137,150	128,650
Cash & ST Invts	190,914	185,325	208,211	234,947	264,934
Inventory	0	0	0	0	0
Debtors	9,981	11,733	13,493	15,517	17,844
Other Current Assets	12,420	15,792	15,792	15,792	15,792
Total Assets	380,034	390,973	409,405	431,951	458,052
CT D. L.	4.4.675	20.552	20.552	20.552	20.552
ST Debt	14,675	20,552	20,552	20,552	20,552
Creditors	41,384	38,014	34,973	32,175	29,601
Other Current Liab	18,429	21,064	20,539	20,036	19,552
LT Debt	68,401	63,183	63,183	63,183	63,183
Other LT Liabilities	13,193	10,355	10,355	10,355	10,355
Shareholder's Equity	218,607	231,871	253,819	279,616	308,724
Minority Interests	5,345	5,934	5,984	6,034	6,084
Total Cap. & Liab.	380,034	390,973	409,405	431,951	458,052
Non-Cash Wkg. Capital	(37,412)	(31,553)	(26,227)	(20,902)	(15,517)
Net Cash/(Debt)	107,838	101,590	124,476	151,212	181,199
Debtors Turn (avg days)	27.3	32.0	34.3	35.9	37.8
Creditors Turn (avg days)	245.2	254.3	233.2	193.8	162.0
Inventory Turn (avg days)	N/A	N/A	N/A	N/A	N/A
Asset Turnover (x)	0.3	0.3	0.3	0.4	0.4
Current Ratio (x)	2.9	2.7	3.1	3.7	4.3
Quick Ratio (x)	2.7	2.5	2.9	3.4	4.1
Net Debt/Equity (X)	CASH	CASH	CASH	CASH	CASH
Net Debt/Equity ex MI (X)	CASH	CASH	CASH	CASH	CASH
Capex to Debt (%)	13.1	9.9	9.9	9.9	9.9
Z-Score (X)	NA	NA	NA	NA	NA
Source: Company, DBS HK					

Cash Flow Statement (RMB m)

FY Dec	2021A	2022A	2023F	2024F	2025F
Pre-Tax Profit	10,778	10,112	18,710	22,559	25,869
Dep. & Amort.	22,559	20,084	14,500	14,500	14,500
Tax Paid	(3,187)	(2,578)	(3,500)	(3,500)	(3,499)
Assoc. & JV Inc/(loss)	0	0	0	0	0
(Pft)/ Loss on disposal of FAs	(45)	(868)	0	0	0
Chg in Wkg.Cap.	(18,691)	(16,758)	(5,326)	(5,325)	(5,385)
Other Operating CF	8,708	16,178	1,288	1,288	1,288
Net Operating CF	20,122	26,170	25,672	29,522	32,773
Capital Exp.(net)	(10,896)	(8,286)	(8,286)	(8,286)	(8,286)
Other Invts.(net)	(8,584)	5,103	(500)	(500)	(500)
Invts in Assoc. & JV	0	0	0	0	0
Div from Assoc & JV	0	0	0	0	0
Other Investing CF	(11,964)	(761)	6,000	6,000	6,000
Net Investing CF	(31,444)	(3,944)	(2,786)	(2,786)	(2,786)
Div Paid	0	0	0	0	0
Chg in Gross Debt	31	(7)	0	0	0
Capital Issues	(7,246)	(1,725)	0	0	0
Other Financing CF	(18,003)	(68,165)	(87,372)	(114,108)	(144,095)
Net Financing CF	(25,218)	(69,897)	(87,372)	(114,108)	(144,095)
Currency Adjustments	47,671	64,486	87,372	114,108	144,095
Chg in Cash	11,131	16,815	22,886	26,736	29,987
Opg CFPS (RMB)	14.07	15.43	11.14	12.53	13.72
Free CFPS (RMB)	3.35	6.43	6.25	7.63	8.80
Source: Company, DBS HK					



HK Share - Target Price & Ratings 12-mth History



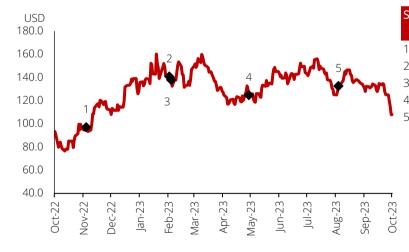
S.No.	Date	Closing	Target	Rating
		Price	Price	
1	23-Nov-22	HK\$89.90	HK\$198.00	BUY
2	21-Feb-23	HK\$141.30	HK\$208.00	BUY
3	23-Feb-23	HK\$140.50	HK\$210.00	BUY
4	18-May-23	HK\$123.80	HK\$174.00	BUY
5	23-Aug-23	HK\$123.00	HK\$204.00	BUY

Source: DBS HK

Analyst: Tsz Wang Tam

Lilian Lv

US Share - Target Price & Ratings 12-mth History



S.No.	Date	Closing	Target	Rating
		Price	Price	
	23-Nov-22	US\$95.08	US\$203.00	BUY
2	21-Feb-23	US\$141.71	US\$213.00	BUY
3	23-Feb-23	US\$137.12	US\$215.00	BUY
1	18-May-23	US\$130.52	US\$178.00	BUY
5	23-Aug-23	US\$128.36	US\$206.00	BUY

Source: DBS HK

Analyst: Tsz Wang Tam

Lilian Lv



DBS HK recommendations are based on an Absolute Total Return* Rating system, defined as follows:

STRONG BUY (>20% total return over the next 3 months, with identifiable share price catalysts within this time frame)

BUY (>15% total return over the next 12 months for small caps, >10% for large caps)

HOLD (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)

FULLY VALUED (negative total return, i.e., > -10% over the next 12 months)

SELL (negative total return of > -20% over the next 3 months, with identifiable share price catalysts within this time frame)

Completed Date: 20 Oct 2023 08:29:38 (HKT) Dissemination Date: 20 Oct 2023 10:12:00 (HKT)

Sources for all charts and tables are DBS HK unless otherwise specified.

GENERAL DISCLOSURE/DISCLAIMER

This report is prepared by DBS Bank (Hong Kong) Limited ("DBS HK"). This report is solely intended for the clients of DBS Bank Ltd., DBS HK, DBS Vickers (Hong Kong) Limited ("DBSV HK"), and DBS Vickers Securities (Singapore) Pte Ltd. ("DBSVS"), its respective connected and associated corporations and affiliates only and no part of this document may be (i) copied, photocopied or duplicated in any form or by any means or (ii) redistributed without the prior written consent of DBS HK.

The research set out in this report is based on information obtained from sources believed to be reliable, but we (which collectively refers to DBS Bank Ltd., DBS HK, DBSVS, its respective connected and associated corporations, affiliates and their respective directors, officers, employees and agents (collectively, the "DBS Group") have not conducted due diligence on any of the companies, verified any information or sources or taken into account any other factors which we may consider to be relevant or appropriate in preparing the research. Accordingly, we do not make any representation or warranty as to the accuracy, completeness or correctness of the research set out in this report. Opinions expressed are subject to change without notice. This research is prepared for general circulation. Any recommendation contained in this document does not have regard to the specific investment objectives, financial situation and the particular needs of any specific addressee. This document is for the information of addressees only and is not to be taken in substitution for the exercise of judgement by addressees, who should obtain separate independent legal or financial advice. The DBS Group accepts no liability whatsoever for any direct, indirect and/or consequential loss (including any claims for loss of profit) arising from any use of and/or reliance upon this document and/or further communication given in relation to this document. This document is not to be construed as an offer or a solicitation of an offer to buy or sell any securities. The DBS Group, along with its affiliates and/or persons associated with any of them may from time to time have interests in the securities mentioned in this document. The DBS Group, may have positions in, and may effect transactions in securities mentioned herein and may also perform or seek to perform broking, investment banking and other banking services for these companies.

Any valuations, opinions, estimates, forecasts, ratings or risk assessments herein constitutes a judgment as of the date of this report, and there can be no assurance that future results or events will be consistent with any such valuations, opinions, estimates, forecasts, ratings or risk assessments. The information in this document is subject to change without notice, its accuracy is not guaranteed, it may be incomplete or condensed, it may not contain all material information concerning the company (or companies) referred to in this report and the DBS Group is under no obligation to update the information in this report.

This publication has not been reviewed or authorized by any regulatory authority in Singapore, Hong Kong or elsewhere. There is no planned schedule or frequency for updating research publication relating to any issuer.

The valuations, opinions, estimates, forecasts, ratings or risk assessments described in this report were based upon a number of estimates and assumptions and are inherently subject to significant uncertainties and contingencies. It can be expected that one or more of the estimates on which the valuations, opinions, estimates, forecasts, ratings or risk assessments were based will not materialize or will vary significantly from actual results. Therefore, the inclusion of the valuations, opinions, estimates, forecasts, ratings or risk assessments described herein IS NOT TO BE RELIED UPON as a representation and/or warranty by the DBS Group (and/or any persons associated with the aforesaid entities), that:

- (a) such valuations, opinions, estimates, forecasts, ratings or risk assessments or their underlying assumptions will be achieved, and
- (b) there is any assurance that future results or events will be consistent with any such valuations, opinions, estimates, forecasts, ratings or risk assessments stated therein.

Please contact the primary analyst for valuation methodologies and assumptions associated with the covered companies or price targets. Any assumptions made in this report that refers to commodities, are for the purposes of making forecasts for the company (or companies) mentioned herein. They are not to be construed as recommendations to trade in the physical commodity or in the futures contract relating to the commodity referred to in this report.

DBS Vickers Securities (USA) Inc ("DBSVUSA"), a US-registered broker-dealer, does not have its own investment banking or research department, has not participated in any public offering of securities as a manager or co-manager or in any other investment banking transaction in the past twelve months and does not engage in market-making.

^{*}Share price appreciation + dividends



ANALYST CERTIFICATION

The research analyst(s) primarily responsible for the content of this research report, in part or in whole, certifies that the views about the companies and their securities expressed in this report accurately reflect his/her personal views. The analyst(s) also certifies that no part of his/her compensation was, is, or will be, directly or indirectly, related to specific recommendations or views expressed in the report. The research analyst (s) primarily responsible for the content of this research report, in part or in whole, certifies that he or his associate does not serve as an officer of the issuer or the new listing applicant (which includes in the case of a real estate investment trust, an officer of the management company of the real estate investment trust; and in the case of any other entity, an officer or its equivalent counterparty of the entity who is responsible for the management of the issuer or the new listing applicant) and the research analyst(s) primarily responsible for the content of this research report or his associate does not have financial interests in relation to an issuer or a new listing applicant that the analyst reviews. DBS Group has procedures in place to eliminate, avoid and manage any potential conflicts of interests that may arise in connection with the production of research reports. The research analyst(s) responsible for this report operates as part of a separate and independent team to the investment banking function of the DBS Group and procedures are in place to ensure that confidential information held by either the research or investment banking function is handled appropriately. There is no direct link of DBS Group's compensation to any specific investment banking function of the DBS Group.

COMPANY-SPECIFIC / REGULATORY DISCLOSURES

DBS Bank Ltd, DBS HK, DBSVS or their subsidiaries and/or other affiliates have a proprietary position in Baidu Inc (9888 HK)
recommended in this report as of 17 Oct 2023.

2. Compensation for investment banking services:

DBSVUSA does not have its own investment banking or research department, nor has it participated in any public offering of securities as a manager or co-manager or in any other investment banking transaction in the past twelve months. Any US persons wishing to obtain further information, including any clarification on disclosures in this disclaimer, or to effect a transaction in any security discussed in this document should contact DBSVUSA exclusively.

3. Disclosure of previous investment recommendation produced:

DBS Bank Ltd, DBSVS, DBS HK, their subsidiaries and/or other affiliates of DBSVUSA may have published other investment recommendations in respect of the same securities / instruments recommended in this research report during the preceding 12 months. Please contact the primary analyst listed on page 1 of this report to view previous investment recommendations published by DBS Bank Ltd, DBS HK, DBSVS, their subsidiaries and/or other affiliates of DBSVUSA in the preceding 12 months.

¹ An associate is defined as (i) the spouse, or any minor child (natural or adopted) or minor step-child, of the analyst; (ii) the trustee of a trust of which the analyst, his spouse, minor child (natural or adopted) or minor step-child, is a beneficiary or discretionary object; or (iii) another person accustomed or obliged to act in accordance with the directions or instructions of the analyst.

² Financial interest is defined as interests that are commonly known financial interest, such as investment in the securities in respect of an issuer or a new listing applicant, or financial accommodation arrangement between the issuer or the new listing applicant and the firm or analysis. This term does not include commercial lending conducted at arm's length, or investments in any collective investment scheme other than an issuer or new listing applicant notwithstanding the fact that the scheme has investments in securities in respect of an issuer or a new listing applicant.



RESTRICTIONS ON DISTRIBUTION

ESTRICTIONS ON	T. T
General	This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation.
Australia	This report is being distributed in Australia by DBS Bank Ltd, DBSVS or DBSV HK. DBS Bank Ltd holds Australian Financial Services Licence no. 475946.
	DBS Bank Ltd, DBSVS and DBSV HK are exempted from the requirement to hold an Australian Financial Services Licence under the Corporation Act 2001 ("CA") in respect of financial services provided to the recipients. Both DBS Bank Ltd and DBSVS are regulated by the Monetary Authority of Singapore under the laws of Singapore, and DBSV HK is regulated by the Hong Kong Securities and Futures Commission under the laws of Hong Kong, which differ from Australian laws.
	Distribution of this report is intended only for "wholesale investors" within the meaning of the CA.
Hong Kong	This report is being distributed in Hong Kong by DBS Bank Ltd, DBS Bank (Hong Kong) Limited and DBS Vickers (Hong Kong) Limited, all of which are registered with or licensed by the Hong Kong Securities and Futures Commission to carry out the regulated activity of advising on securities. DBS Bank Ltd., Hong Kong Branch is a limited liability company incorporated in Singapore.
Indonesia	This report is being distributed in Indonesia by PT DBS Vickers Sekuritas Indonesia.
Malaysia	This report is distributed in Malaysia by AllianceDBS Research Sdn Bhd ("ADBSR"). Recipients of this report, received from ADBSR are to contact the undersigned at 603-2604 3333 in respect of any matters arising from or in connection with this report. In addition to the General Disclosure/Disclaimer found at the preceding page, recipients of this report are advised that ADBSR (the preparer of this report), its holding company Alliance Investment Bank Berhad, their respective connected and associated corporations, affiliates, their directors, officers, employees, agents and parties related or associated with any of them may have positions in, and may effect transactions in the securities mentioned herein and may also perform or seek to perform broking, investment banking/corporate advisory and other services for the subject companies. They may also have received compensation and/or seek to obtain compensation for broking, investment banking/corporate advisory and other services from the subject companies.
	Wong Ming Tek, Executive Director, ADBSR
Singapore	This report is distributed in Singapore by DBS Bank Ltd (Company Regn. No. 196800306E) or DBSVS (Company Regn No. 198600294G), both of which are Exempt Financial Advisers as defined in the Financial Advisers Act and regulated by the Monetary Authority of Singapore. DBS Bank Ltd and/or DBSVS, may distribute reports produced by its respective foreign entities, affiliates or other foreign research houses pursuant to an arrangement under Regulation 32C of the Financial Advisers Regulations. Where the report is distributed in Singapore to a person who is not an Accredited Investor, Expert Investor or an Institutional Investor, DBS Bank Ltd accepts legal responsibility for the contents of the report to such persons only to the extent required by law. Singapore recipients should contact DBS Bank Ltd at 6878 8888 for matters arising from, or in connection with the report.
Thailand	This report is being distributed in Thailand by DBS Vickers Securities (Thailand) Co Ltd.
United	For any query regarding the materials herein, please contact [Chanpen Sirithanarattanakul] at [research@th.dbs.com] This report is produced by DBS HK which is regulated by the Hong Kong Monetary Authority
Kingdom	This report is disseminated in the United Kingdom by DBS Bank Ltd, London Branch ("DBS UK"). DBS Bank Ltd is regulated by the Monetary Authority of Singapore. DBS UK is authorised by the Prudential Regulation Authority and is subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. Details about the extent of our regulation by the Prudential Regulation Authority are available from us on request. In respect of the United Kingdom, this report is solely intended for the clients of DBS UK, its respective connected and associated corporations and affiliates only and no part of this document may be (i) copied, photocopied or duplicated in any form or by any means or (ii) redistributed without the prior written consent of DBS UK. This communication is directed at persons having professional experience in matters relating to investments. Any investment activity following from this communication will only be engaged in with such persons. Persons who do not have professional experience in matters relating to investments should not rely on this communication.





Dubai International Financial Centre

This communication is provided to you as a Professional Client or Market Counterparty as defined in the DFSA Rulebook Conduct of Business Module (the "COB Module"), and should not be relied upon or acted on by any person which does not meet the criteria to be classified as a Professional Client or Market Counterparty under the DFSA rules.

This communication is from the branch of DBS Bank Ltd operating in the Dubai International Financial Centre (the "DIFC") under the trading name "DBS Bank Ltd. (DIFC Branch)" ("DBS DIFC"), registered with the DIFC Registrar of Companies under number 156 and having its registered office at units 608 - 610, 6th Floor, Gate Precinct Building 5, PO Box 506538, DIFC, Dubai, United Arab Emirates.

DBS DIFC is regulated by the Dubai Financial Services Authority (the "DFSA") with a DFSA reference number F000164. For more information on DBS DIFC and its affiliates, please see http://www.dbs.com/ae/our--network/default.page.

Where this communication contains a research report, this research report is prepared by the entity referred to therein, which may be DBS Bank Ltd or a third party, and is provided to you by DBS DIFC. The research report has not been reviewed or authorised by the DFSA. Such research report is distributed on the express understanding that, whilst the information contained within is believed to be reliable, the information has not been independently verified by DBS DIFC.

Unless otherwise indicated, this communication does not constitute an "Offer of Securities to the Public" as defined under Article 12 of the Markets Law (DIFC Law No.1 of 2012) or an "Offer of a Unit of a Fund" as defined under Article 19(2) of the Collective Investment Law (DIFC Law No.2 of 2010).

The DFSA has no responsibility for reviewing or verifying this communication or any associated documents in connection with this investment and it is not subject to any form of regulation or approval by the DFSA. Accordingly, the DFSA has not approved this communication or any other associated documents in connection with this investment nor taken any steps to verify the information set out in this communication or any associated documents, and has no responsibility for them. The DFSA has not assessed the suitability of any investments to which the communication relates and, in respect of any Islamic investments (or other investments identified to be Shari'a compliant), neither we nor the DFSA has determined whether they are Shari'a compliant in any way.

Any investments which this communication relates to may be illiquid and/or subject to restrictions on their resale. Prospective purchasers should conduct their own due diligence on any investments. If you do not understand the contents of this document you should consult an authorised financial adviser.

United States

This report was prepared by DBS HK. DBSVUSA did not participate in its preparation. The research analyst(s) named on this report are not registered as research analysts with FINRA and are not associated persons of DBSVUSA. The research analyst(s) are not subject to FINRA Rule 2241 restrictions on analyst compensation, communications with a subject company, public appearances and trading securities held by a research analyst. This report is being distributed in the United States by DBSVUSA, which accepts responsibility for its contents. This report may only be distributed to Major U.S. Institutional Investors (as defined in SEC Rule 15a-6) and to such other institutional investors and qualified persons as DBSVUSA may authorize. Any U.S. person receiving this report who wishes to effect transactions in any securities referred to herein should contact DBSVUSA directly and not its affiliate.

Other jurisdictions

In any other jurisdictions, except if otherwise restricted by laws or regulations, this report is intended only for qualified, professional, institutional or sophisticated investors as defined in the laws and regulations of such jurisdictions.

DBS Bank (Hong Kong) Limited

13 th Floor One Island East, 18 Westlands Road, Quarry Bay, Hong Kong Tel: (852) 3668-4181, Fax: (852) 2521-1812



DBS Regional Research Offices

HONG KONG DBS Bank (Hong Kong) Ltd Contact: Dennis Lam

13th Floor One Island East, 18 Westlands Road, Quarry Bay, Hong Kong

Tel: 852 3668 4181 Fax: 852 2521 1812 e-mail: dbsvhk@dbs.com

THAILAND DBS Vickers Securities (Thailand) Co Ltd Contact: Chanpen Sirithanarattanakul

989 Siam Piwat Tower Building, 9th, 14th-15th Floor Rama 1 Road, Pathumwan, Bangkok Thailand 10330 Tel. 66 2 857 7831

Fax: 66 2 658 1269

e-mail: research@th.dbs.com Company Regn. No 0105539127012

Securities and Exchange Commission, Thailand

SINGAPORE DBS Bank Ltd Contact: Paul Yong

12 Marina Boulevard, Marina Bay Financial Centre Tower 3 Singapore 018982 Tel: 65 6878 8888

e-mail: groupresearch@dbs.com Company Regn. No. 196800306E INDONESIA

PT DBS Vickers Sekuritas (Indonesia) Contact: Maynard Priajaya Arif

DBS Bank Tower Ciputra World 1, 32/F Jl. Prof. Dr. Satrio Kav. 3-5 Jakarta 12940, Indonesia Tel: 62 21 3003 4900 Fax: 6221 3003 4943

e-mail: indonesiaresearch@dbs.com