

Baidu (BIDU US)

Takeaways from Internet Tour

During our five-day internet tour of Tokyo, Beijing and Hong Kong (12-16 March) we had a group meeting with Sharon Ng, Head of Investor Relations of Baidu, and a separate meeting with Joe Zhou, CFO of Sogou. We reiterate our BUY rating and PO of USD280.

2017 Recap and 2018 Outlook

Management summarized Baidu's 2017 with 3Rs: Renewal, Recovery and Re-advance. Baidu introduced its new CFO and COO and refreshed its mission statement in 2017 to achieve three goals: 1) strengthen the core foundation of mobile to grasp advertising opportunities; 2) build new AI businesses; and 3) divest non-core businesses like mobile gaming and delivery. In 2018, Baidu would continue to spend on mobile businesses, driving ad revenue through search and feed. In addition, Baidu would spend on its Financial Services Group (FSG) because it has a very different growth profile than the core business.

Advertising revenue growth drivers

Management noted that ad revenues are driven by better data, technology, ad formats and particularly data sharing from customers. Generally, PC traffic is declining and traffic of mobile is growing much slowly than before. Under this background, the key is to extract better yield from each that Baidu can provide to advertisers. Management pointed out that customer data is a new layer to explore, which means Baidu can do more accurate targeting if customers are willing to share user data with Baidu. Once an advertiser in a vertical starts to share data with Baidu, the other advertisers would like to make quick follow-ups.

More importantly, Baidu continue to develop innovative ad products: **1) Dynamic ads** are widely adopted by customers in transaction-driven verticals with structured product catalogues. (continued...)

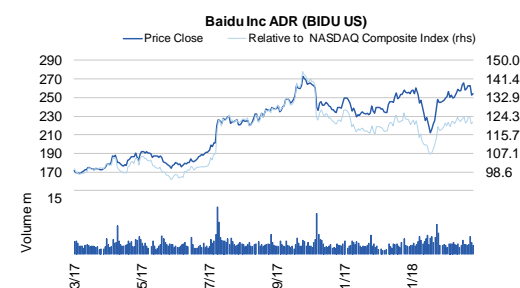
BUY

| | |
|--------------------------------|---------------------|
| Price (20 Mar 2018) | USD254.5 |
| Price objective | USD280.0 |
| Pot'l up/downside | 10.0% |
| Market cap | USD88.6b (USD88.6b) |
| 52-week high-low | USD272.8-168.3 |
| No. of shares (m) | 347.8 |
| Avg. daily turnover (3M / 12M) | USD634m / USD579m |

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Share price performance with volume



| Share price (%) | -1 mth | -3 mth | -12 mth |
|-------------------|--------|--------|---------|
| Ordinary shares | 3.7 | 9 | 44.5 |
| Relative to Index | 1.9 | 3.2 | 19.7 |

Source: Bloomberg

Valuation

| YE: | Dec 15 | Dec 16 | Dec 17 | Dec 18E | Dec 19E |
|----------------------------------|--------|--------|--------|---------|---------|
| Revenue (CNYm) | 66,382 | 70,549 | 84,809 | 103,129 | 123,176 |
| Operating profit (CNYm) | 11,672 | 10,049 | 15,691 | 17,298 | 21,895 |
| Operating profit - ex SBC (CNYm) | 13,059 | 11,636 | 18,935 | 21,757 | 27,221 |
| Net profit (CNYm) | 33,664 | 11,632 | 18,301 | 17,155 | 20,925 |
| Net profit - ex SBC (CNYm) | 35,051 | 13,219 | 21,545 | 21,615 | 26,251 |
| Normalised EPS (CNY) | 99.11 | 38.03 | 61.64 | 61.54 | 74.74 |
| Normalised EPS growth | 163% | (62%) | 62% | (0%) | 21% |
| Normalised P/E (x) | 16.26 | 42.37 | 26.14 | 26.19 | 21.56 |
| ROAE | 51.3% | 13.5% | 17.6% | 13.6% | 13.9% |

Source: Company data, Bloomberg, Mizuho research

E-commerce and travel are the first two verticals to try dynamic ads in 3Q17; afterward, the format was rolled out to real estate and auto verticals in 4Q17. **2) oCPC (optimized cost per click)** simplified the bidding process and improved conversion rate with the aid of big data and machine learning.

Understanding expenses spending in 2018

Management explained that content costs are for iQiyi and feeds, R&D for new AI businesses (mainly DuerOS plus Apollo) and SG&A support for core businesses.

TAC: Management noted that Baidu focused more on margin levels in 2017 and decided not to bid for TAC contracts when they felt their competitors like Sogou drove prices too competitively. Despite 50% of Baidu's traffic being organic, management believed TAC investment is still important as there is room for Baidu to convert external traffic to organic traffic. In competition for TAC, Baidu differs from Sogou and even Toutiao in that Baidu has two engine products to generate ad revenue. If Baidu invests in channel, no matter if it is in SG&A or TAC, Baidu can monetize two products (search and feed) which are more compelling than any single-field player. Baidu will also spend on pre-installations of video apps because videos are becoming a more prominent kind of contents, e.g., 40% of coverage of contents in feed is video format. Videos here include long form, short form and micro videos. **Management expected TAC to remain stable or perhaps be up a little bit, but at least not decline in 2018.**

SG&A: Management noted that to grow the top line faster in 2018, Baidu would make decent investment in SG&A because SG&A spending supports the core business and improves user experiences of the Baidu App.

Content costs: Management noted that the majority of content costs (higher than last year level of RMB700m) would still go for iQiyi and 8% of content cost is going to support feed social media and public platform "Baijiahao". There are currently 100m content publishers on "Baijiahao". Baidu shared ad revenues in feed (e.g., ad in article or videos in feed) to the content creators with a sharing percentage up to 100%. But Baidu didn't share ad revenue generated from ads between headlines, which contributed the majority of feed ad revenue.

R&D: 50% of Baidu employees and 40% of iQiyi employees are in R&D. Management expected R&D as a percentage of revenue to go up a little bit in 2018 versus 2017.

Margin impact: Management noted that feed is driven by content quality, matching accuracy, and channel for users and advertisers. Search and feeds generated around 50% margins, iQiyi dragged margin down to around 10-12% and new AI initiatives dragged 20% margins (20% of margin is to invest in new AI). **It is probable that margin in 2018 be lower than 2017 under the estimation that:** 1) R&D and SG&A go on a little bit in 2018; 2) content cost as a percentage of revenue maintains at 17% or less; and 3) TAC stays stable.

DuerOS

CPM of mobile is higher than CPC of PC because Baidu accumulated more data points on mobile so that they can support advertisers better on mobile. Baidu believed Internet opportunities didn't stop with PC and mobile, however, they are going to evolve in different devices. Baidu hoped to power speakers, screens, televisions, headsets using natural languages technologies embedded in DuerOS. Baidu positioned DuerOS to Baidu as Android to Google in the next generation of voices. There would be potential users to connect to the Internet because unlike typing there wouldn't be learning curves to use voices when communicating with machines. Baidu plans to offer DuerOS for free so that to make it scalable. Management updated that Baidu presently worked with 130 OEMs and there were roughly 50 devices on the market powered by DuerOS with a 50m skill base. DuerOS currently powered smartphones (e.g., Huawei, HTC and Xiaomi), televisions (e.g., TCL), speakers (e.g., Novo) and other devices. There are three stages when developing DuerOS: 1) voice recognition dictation; 2) natural language processing; 3) fulfillment which means there is a content ecosystem to fulfill users supporting what users are looking for. Management emphasized that Baidu was an early mover in AI development and DuerOS

was at the early stage of building ecosystem partners and developers. Management believed there is still a lot more to do to enrich DuerOS.

Baidu maps

Management noted that maps is a very important part of Baidu's ecosystem. For instance, Baidu has localized results in search for maps. Maps is also the foundation for HD maps which is one of the services Baidu hope to monetize on Apollo.

Apollo

Apollo, based on an asset light model, is the Android for automatous driving. Baidu provided Apollo for free because open platform has been historically proven to be more scalable and can accumulate data from more players. The monetization model of Apollo is different from that of DuerOS. Baidu monetized Apollo on a per vehicle basis by charging a couple of hundred RMB for HD maps and for security services. Management noted that both to B and to C opportunities exist for Apollo ('to B' means commercial opportunities to businesses partners, and 'to C' means commercial opportunities to customers). For example, there are vehicles in control of buses in manufacturing facilities, airports or campuses. Apollo may start with 'to B' opportunities and capture more 'to C' opportunities in the future.

Sogou

OEM channel traffic environment in general

In whole mobile search market, about 20% of traffic is controlled by OEM. Among the 20% traffic, Baidu occupied 8-10% market share, Sogou acquired 7% market share, and the rest are captured by Shenma and 360.com. There are only four big handset manufactures in the market: Huawei, Oppo, Vivo and Xiaomi. When searching engine companies negotiate contracts with handset manufactures, those manufactures had more speaking power and hope to control situations. On one hand, those manufacturers are larger in market size than search engine companies in general; however, most of their revenues are composed of handset sales and search revenue accounts for only a small percentage of their software revenue.

Management noted that for the past two to three years, the pressure of competition for OEM traffic is more from Shenma and 360.com than from Baidu. Especially for 2017, since Alibaba acquired Shenma in 2014, management of Shenma may largely be incentivised on market share gains. For 360.com, which just got listed in A-share, management has pressure to deliver results that show its internet search business is growing stronger; therefore, 360.com also bid aggressively in the market. Shenma and 360.com together drove the OEM channel price up by 50% YoY in 1H18. Sogou management believes the growth of OEC cost should return to a normal level of 10-20% YoY in 2H18 and 2019. Management noted that Sogou was willing to acquire traffic at breakeven but not to incur a loss, because it is a listed company with bottom line pressure.

There are two main parts of OEM costs. One is for default search box in the browser that OEM pre-installed in handset (search engine companies need to pay OEM to let their search box to be the default one). The other is ongoing visit costs, which mean each day for the queries directed to the searching engine, search engine companies pay the OEM for traffic multiplied by pre-determined unit price. The unit price this year is RMB35 to RMB50 per 1000 queries, which increased 50% YoY versus 2017.

Sogou traffic

Sogou generated 22% traffic from organic channel, 38% from Tencent and 40% from OEM. In 2018 and 2019, management believes organic channel would outpace Tencent channel and OEM channel growth because: 1) management expected 10% YoY OEM channel growth rate to be in line with market; 2) slightly more than 10% YoY Tencent channel growth rate which is also in line with or a little bit higher than market; 3) organic channel traffic reaches close to 30% by the end of 2019. Management expected mobile keyboard contribution to traffic increases from the current 6% to 10-15% in two years.

Organic traffic growth driven by mobile keyboard

Management stated that currently, the organic channel contributes 22% organic traffic and revenue. 3% organic traffic comes from mobile keyboard, which has great potential and is likely to ramp over the next two years. The search recommendation function (including mobile keyboard) currently covers only 30% of total users. Mobile keyboard, as a manufacturer, is a tool to service providers and still cannot generate revenues; therefore the competition for mobile keyboard isn't too intense. Sogou believes they can use mobile keyboard to do search recommendation to generate revenues. Mobile keyboard had 40% market share in 2016, and increased to 50% in 2017, and were expected to reach 70%+ in two years, therefore, management were confident to roll out search recommendation function in next two years. While users use keyboard frequently, searching is only a small portion of their using. Sogou developed information searching sharing functions and search recommendation functions. For example, when two users chat with each other about a hit movie, Sogou can make a recommendation of the introduction of the movie and the link of booking site so that users can easily share the information to the counterparty. Management noted that they would do most testing of the function in 1H18 and expected to see increasing traffic and revenues in 2H18, and hoped it to become a major of traffic in 2019.

Margin

Sogou plan to increase price to compete with players in OEM channel traffic in order to maintain its market share. Management noted that Sogou can still breakeven even if the OEM channel unit price increases 50% YoY for 1H18. Sogou's traffic from OEM channel is expected grow 10% YoY this year in line with market growth. Besides, there is 20% YoY improvement of monetization generated from other channels, so management expected Sogou to make profits in 2H18.

Management believed the overall market would grow at 20% YoY for top line, composed of 10% traffic growth and 10% improvement of monetization. For traditional search part, Sogou tried to take 2% market share from Baidu each year.

Newsfeed products

Management noted that Sogou took newsfeed as a complementary revenue stream while Baidu took it as the second pillar of revenue growth. Sogou was targeting 10m DAUs in two years for newsfeed and expected newsfeed to contribute 10% of total revenue in 2019. Management noted that newsfeed ad revenue would certainly take share from search industry, because its growth outpaced search ad revenue. Management believed that Baidu had to do newsfeed to compete for ad dollars with Toutiao, but for Sogou, its market share in terms of newsfeed revenue, is still far from the target of 10% so Sogou hasn't felt much pressure from Toutiao.

For newsfeed, Sogou already built a high-quality content platform, sourcing contents from Sohu and Tencent and now it need to build up scenarios to push these contents to users including its mobile browser users, search App users, mobile keyboard users and its independent newsfeed App users.

Sogou management believed it managed to take market share from Baidu in search which was already 80% dominated by Baidu, and similarly, it could also have its card in newsfeed area because Baidu and Toutiao together occupy less than 20% market share in newsfeed. In addition, management believed Sogou already had quality contents and power channels to push contents, so it is not hard for them to build a 10m DAU for Sogou newsfeed product, however, to grow DAU to maybe 30m or 40m, they need more additional traffic and this could be difficult.

Cooperation with Tencent

Management believed Tencent wants to transform Weixin from social network to a general platform and they want to Weixin users to do many other things besides communicating on

WeChat. Tencent would focus on three things for the coming two to three years: 1) mini program to enable Weixin users to do e-commerce and O2O services; 2) Kanyikan is newsfeed within WeChat platform; 3) integrated search. If Weixin users could have 10-20% of their behaviour on the Weixin platform, it would be considered to the success of Tencent's general platform strategy.

Sogou management believed that Tencent's integrated search is targeted to compete with Baidu and Tencent's advantages to do search business lie in contents within Tencent system. There are two search engines behind Weixin search box: internal part provided by Tencent and general part provided by Sogou. Since October 2017, Tencent cooperated with Sogou on general search part so that Tencent could immediately obtain a general search ability in apparel with Baidu. What Tencent really focuses is on internal search part which is the key part of integrated search. Management noted that they currently don't have a formal contract with Tencent on cooperation but plan to negotiate one.

Management shared with us that from a monetization point of view, Tencent's strategy is to have less ad loads but higher CPC/CPM. Management believed Tencent integrated search will naturally ramp up when mini programs really ramp up. 10-20% merchants of mini programs are small businesses and only do business on mini program platform. As mini programs grow, there will be a time when 10-20% services and contents would no longer be accessible from outside search engine, so users will gradually shift from outside to Weixin to do search. Management believed cooperation with Tencent could be quite powerful.

Management noted that a mobile browser or search app user, on average, searches 1 to 6 times each day. Tencent's WeChat has 800-900m DAU. If WeChat users eventually can develop search habits on the WeChat platform (for example, each user searching 4-6 times daily), the addressable market for Tencent integrated search could be 3bn webpage searches each day. Nowadays, the whole industry (PC plus mobile) generates 2-3bn webpage searches per day. In other words, Tencent integrated search has potential to double the overall market. Management noted that currently Sogou's CTR (click through rate) on WeChat is 30%.

Others

Management also shared their opinions on voice search. They believe voice search is still traditional search but allow users to input with voices. Voice search occupied quite a small part of total mobile search queries. Voice compared with typing, empowers users to communicate with machines more easily, however, communication is not the point, Users need to get solution for search and voice search makes it inconvenient to delivery search results. If search engine returns back with 10 links for a query, it cannot use voice to read all links so it has to come up with only one answer or solution. The key is to let the machine have natural language and understanding capability so that it can understand information and knowledge on the internet and then it can do machine learning and reasoning decision making. After the machine understands the question raised by users, it can give the answer or solution to solve the problem. Currently, for example, Siri does well in voice recognition and can understand questions but it doesn't have much ability to give answers. Google does much better in giving answers. 10% of Google's search results are direct answers not links.

Valuation and risks

Valuation

We reiterate our BUY rating and maintain our DCF based PO of USD280. We adjusted our estimates considering that adapting ASC606 would impact Baidu's revenue recognition: Our top line estimate is at CNY20.49b (+21.3% YoY) for 1Q18, CNY103.13b (+21.6% YoY) for FY18 and CNY123.18b (+19.4% YoY) for FY19. Our non-GAAP OM estimate is 15.7% for 1Q18, 21.1% for FY18 and 22.1% for FY19. Our non-GAAP EPS estimate is CNY10.16 for 1Q18, CNY62.11 for FY18 and CNY74.74 for FY19.

Fig 1 Earnings forecast revisions

| | 1Q18E | | | FY18E | | | FY19E | | |
|-----------------------------|--------|--------|----------|-----------|-----------|----------|-----------|-----------|----------|
| | Old | New | % or bp) | Old | New | % or bp) | Old | New | % or bp) |
| Total net revenues (CNYm) | 21,648 | 20,493 | -5.3% | 106,063.5 | 103,128.7 | -2.8% | 126,712.1 | 123,176.3 | -2.8% |
| YoY | 28.2% | 21.3% | | 25.5% | 21.6% | | 19.5% | 19.4% | |
| Non-GAAP operating margin % | 15.0% | 15.7% | 70 | 19.2% | 21.1% | 194 | 20.4% | 22.1% | 175 |
| Non-GAAP diluted EPS (CNY) | 11.07 | 10.16 | -8.2% | 61.95 | 62.11 | 0.3% | 75.16 | 74.74 | -0.6% |

Source: Company reports, Mizuho research

Risks

Downside risks: 1) slower-than-expected economic growth dampening digital media spending; 2) weaker-than-anticipated operational leverage that could drive margins lower; and 3) stiffer competition from both large and small players, attracting users and advertisers away from Baidu.

Financials

Fig 2

| Summary income statement (CNYm) | Dec 15 | Dec 16 | Dec 17 | Dec 18E | Dec 19E |
|---------------------------------|----------|----------|----------|----------|----------|
| Revenue | 66,382 | 70,549 | 84,809 | 103,129 | 123,176 |
| Cost of goods sold | (27,458) | (35,279) | (43,062) | (53,861) | (64,328) |
| Gross profit | 38,924 | 35,270 | 41,747 | 49,268 | 58,848 |
| Research & development expenses | (10,176) | (10,151) | (12,928) | (16,584) | (19,708) |
| Gen & admin expenses | - | - | - | - | - |
| SG&A | (27,252) | (25,221) | (26,056) | (31,970) | (36,953) |
| Operating profit | 11,672 | 10,049 | 15,691 | 17,298 | 21,895 |
| Share based compensation | (1,387) | (1,587) | (3,244) | (4,459) | (5,326) |
| Operating profit - ex SBC | 13,059 | 11,636 | 18,935 | 21,757 | 27,221 |
| Pre-tax profit | 37,907 | 14,509 | 21,283 | 20,910 | 25,507 |
| Taxation | (5,474) | (2,914) | (2,995) | (3,764) | (4,591) |
| Minorities | 1,232 | 37 | 13 | 9 | 9 |
| Net profit | 33,664 | 11,632 | 18,301 | 17,155 | 20,925 |
| Normalised net profit | 35,051 | 13,219 | 21,545 | 21,615 | 26,251 |

Source: Company data, Mizuho research

Fig 3

| Key ratios | Dec 15 | Dec 16 | Dec 17 | Dec 18E | Dec 19E |
|----------------------------|--------|--------|--------|----------|---------|
| Revenue growth | 35.33% | 6.28% | 20.21% | 21.60% | 19.44% |
| Net profit margin | 50.7% | 16.5% | 21.6% | 16.6% | 17.0% |
| Norm. net profit growth | 165% | (62%) | 63% | 0% | 21% |
| EPS growth | 172% | (65%) | 56% | (7%) | 22% |
| Normalised EPS growth | 163% | (62%) | 62% | (0%) | 21% |
| Gross profit margin | 58.6% | 50.0% | 49.2% | 47.8% | 47.8% |
| Operating margin | 17.58% | 14.24% | 18.50% | 16.77% | 17.78% |
| Norm. net profit margin | 52.8% | 18.7% | 25.4% | 21.0% | 21.3% |
| DPS (CNY) | - | - | - | - | - |
| Dividend yield | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| BVPS (CNY) | 229.8 | 266.2 | 332.2 | 393.7 | 469.2 |
| Tax rate | 14.44% | 20.08% | 14.07% | 18.00% | 18.00% |
| Dividend payout ratio | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Net debt (CNYm) | 23,886 | 23,255 | 24,476 | (52,076) | (1,089) |
| Net debt to equity | 29.76% | 25.20% | 21.22% | (38.02%) | (0.67%) |
| ROAE | 51.3% | 13.5% | 17.6% | 13.6% | 13.9% |
| Days of account receivable | 20.87 | 20.85 | 18.68 | 17.93 | 18.07 |
| Days of account payable | - | - | - | - | - |
| Cash cycle | 20.87 | 20.85 | 18.68 | 17.93 | 18.07 |

Source: Company data, Mizuho research

Fig 4

| Summary balance sheet (CNYm) | Dec 15 | Dec 16 | Dec 17 | Dec 18E | Dec 19E |
|-------------------------------------|---------------|---------------|---------------|----------------|----------------|
| Cash and equivalents | 10,056 | 11,216 | 11,336 | 87,888 | 36,901 |
| Accounts receivable | 3,927 | 4,109 | 4,571 | 5,558 | 6,639 |
| Prepayments | 4,341 | 5,145 | 24,106 | 29,313 | 35,011 |
| Total current assets | 78,234 | 99,759 | 151,169 | 188,802 | 157,431 |
| Long-term investments | 54,224 | 66,896 | 84,753 | 84,476 | 87,024 |
| Net fixed assets | - | - | - | - | - |
| Total assets | 147,853 | 181,997 | 251,728 | 289,084 | 260,261 |
| Accounts payable | - | - | - | - | - |
| Customer deposits | 5,420 | 6,032 | 6,785 | 8,251 | 9,855 |
| Total current liabilities | 26,103 | 46,102 | 82,057 | 97,799 | 42,724 |
| Other long-term liabilities | 152 | 93 | 112 | 112 | 112 |
| Total liabilities | 63,638 | 84,255 | 121,356 | 137,098 | 82,023 |
| Shareholders' funds | 80,256 | 92,274 | 115,346 | 136,961 | 163,212 |
| Total liabilities & equity | 147,853 | 181,997 | 251,728 | 289,084 | 260,261 |

Source: Company data, Mizuho research

Fig 5

| Summary cash flow statement | Dec 15 | Dec 16 | Dec 17 | Dec 18E | Dec 19E |
|--|---------------|---------------|---------------|----------------|----------------|
| Operating ebitda (CNYm) | 15,273 | 14,032 | 19,872 | 20,928 | 25,837 |
| Decrease in working capital (CNYm) | 2,695 | 20,608 | 13,453 | 8,807 | (62,662) |
| Other operating cash flow (CNYm) | 4,303 | (12,132) | 4,685 | 5,790 | 6,374 |
| Operating cash flow (CNYm) | 23,576 | 24,209 | 41,273 | 39,984 | (25,126) |
| Interest received (CNYm) | 1,321 | 1,184 | 1,539 | 2,068 | 2,068 |
| Tax paid (CNYm) | (5,474) | (2,914) | (2,995) | (3,764) | (4,591) |
| Cash flow from operations (CNYm) | 19,422 | 22,480 | 39,817 | 38,289 | (27,649) |
| Capital expenditure (CNYm) | (5,230) | (4,189) | (4,951) | (6,021) | (7,191) |
| Free cash flow (CNYm) | 14,193 | 18,291 | 34,866 | 32,268 | (34,840) |
| P/FCF (x) | 40 | 31 | 16 | 17 | n.a. |
| Cash flow from investing activities (CNYm) | (31,272) | (35,911) | (47,718) | 36,384 | (23,339) |
| Cash flow from financing activities (CNYm) | 7,778 | 14,447 | 8,857 | - | - |
| Cash at beginning of period (CNYm) | 14,266 | 10,056 | 11,216 | 11,336 | 87,888 |
| Total cash generated (CNYm) | (4,072) | 1,016 | 956 | 74,673 | (50,988) |
| Implied cash at end of year (CNYm) | 10,056 | 10,994 | 11,336 | 87,888 | 36,901 |
| EV/EBITDA (x) | 41 | 44 | 33 | 27 | 24 |

Source: Company data, Mizuho research

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Companies Mentioned (Prices as of 20 Mar 2018)

Baidu Inc (BIDU US, BUY, PO USD280.0, USD254.5): 9

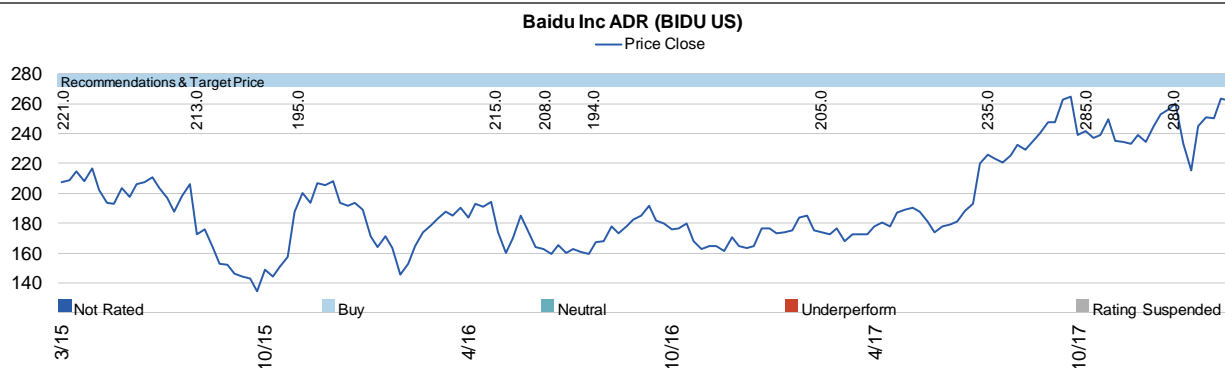
Sohu.com Inc (SOHU US, BUY, PO USD65.0, USD35.1): 9

Tencent Holdings Ltd (700 HK, BUY, PO HKD450.0, HKD466.6)

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Recommendation History

Fig 6 History of recommendations and targets



Source: Bloomberg, Mizuho research

| Company name (ticker) | Date | Recommendation | Price objective | |
|-------------------------------|------------------------|----------------|-----------------|---------|
| Baidu Inc (BIDU US) | 16-Jan-2018 | Buy | USD280.0 | |
| | 27-Oct-2017 | Buy | USD285.0 | |
| | 28-Jul-2017 | Buy | USD235.0 | |
| | 24-Feb-2017 | Buy | USD205.0 | |
| | 29-Jul-2016 | Buy | USD194.0 | |
| | 14-Jun-2016 | Buy | USD208.0 | |
| | 29-Apr-2016 | Buy | USD215.0 | |
| | 30-Oct-2015 | Buy | USD195.0 | |
| | 28-Jul-2015 | Buy | USD213.0 | |
| | 23-Mar-2015 | Buy | USD221.0 | |
| | Sohu.com Inc (SOHU US) | 30-Oct-2017 | Buy | USD65.0 |
| | | 01-Aug-2017 | Buy | USD63.0 |
| | | 21-Jun-2017 | Buy | USD58.0 |
| 05-Jun-2017 | | Buy | USD72.0 | |
| 02-Aug-2016 | | Buy | USD58.0 | |
| 02-Feb-2016 | | Buy | USD62.0 | |
| 30-Jul-2015 | | Buy | USD64.0 | |
| 29-Jun-2015 | | Buy | USD70.0 | |
| Tencent Holdings Ltd (700 HK) | 29-Apr-2015 | Neutral | USD46.0 | |
| | 16-Nov-2017 | Buy | HKD450.0 | |
| | 17-Aug-2017 | Buy | HKD360.0 | |

| | | |
|-------------|-----|----------|
| 18-May-2017 | Buy | HKD300.0 |
| 18-Aug-2016 | Buy | HKD250.0 |
| 05-May-2015 | Buy | HKD195.0 |

Distribution of rating of companies covered by Mizuho Securities Asia Ltd.

| Rating matrix | Distribution of ratings*(%) | Investment banking relationship**(%) |
|---------------|-----------------------------|--------------------------------------|
| BUY | 56.4 | 5.7 |
| NEUTRAL | 28.7 | 7.4 |
| UNDERPERFORM | 14.9 | 0.0 |

Note *: Distribution of rating on all companies covered by Mizuho Securities Asia Ltd.

Note **: Percentage of companies within each rating category receiving investment banking services from Mizuho Securities Asia Ltd in the past 12 months.

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Ratings and price objectives are based on returns expected over the next 6-12 months, subject to limited management discretion.

| | |
|--------------|--|
| BUY | Stocks for which our price objective, as of the date it is set, exceeds the share price by 10% or more as of the date of the rating. |
| NEUTRAL | Stocks for which our price objective, as of the date it is set, is within 10% of the share price as of the date of the rating. |
| UNDERPERFORM | Stocks for which our price objective, as of the date it is set, is below the share price by 10% or more as of the date of the rating, and/or which are expected to be among the stocks that provide lower investment returns than stocks within their respective coverage groups that have "BUY" or "NEUTRAL" ratings. |
| RS | RATING SUSPENDED – rating and price objective temporarily suspended. |
| NR | No Rating – not covered, and therefore not assigned a rating. |

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