TH DATA CAPITAL

Baidu, Inc.

August 9, 2019

For Better Future Growth, 2019 Is An Investment Year For BIDU Despite Headwind From Macro And Market Competition

BIDU will report 2Q19 results on August 19th after the markets close followed by a 9:15pm EST conference call. Based on our data and calculations, we believe BIDU is likely to deliver 2Q19 net revenue in line with consensus but with better margin. Looking beyond quarterly earnings, we believe 2019 is a changing as well as a challenging year for BIDU. On the one hand, the macro economy is weaker, and competition is stronger; on the other hand, BIDU cleaned up the medical sector, and its feed business has yet to be fully developed. For the feed business, while BIDU is more than ready in terms of IT capabilities, its weaker mobile content is constraining BIDU from fully utilizing its IT strength. Therefore, BIDU investing in mobile content including Mobile Baiduile, Haokan video and Bai Jia Hao is the right thing; and only when BIDU has enough mobile content, its feed business can be fully take off. As the investment continues, we believe the two engines of the feed business - content and technology - can be matched, and the feed business can take off. Therefore, we do not expect short term revenue surprises, but rather we believe the company is doing the right thing.

- **Logic and progress of BIDU's investment in mobile content** – In the mobile era, news feed is a new monetization method; the size of the monetization is subject to multiple factors, including traffic, feeds, ad load and fees per click. Among these four factors, for traffic, BIDU has already committed a huge amount of budget to get uses and downloads of its APPs; for effective feeds, BIDU needs to grow its mobile content as the company cannot get the information as easy as on the PC where they can crawl the web. Today, most mobile content is contained within an APP. Therefore, content is a weaker part of the equation for BIDU. In order to offer users enough content in the mobile environment, BIDU needs to develop its own open source content. This part of the investment is likely to last throughout 2019.
- **IQ business is constrained by the government media control** - 2019 is a political sensitive year. The Chinese government has increased its control over media content, and online video is seriously impacted. Therefore, the topline growth of iQiyi (IQ, $17.10 - Intraday, Not Rated) is impacted. Based on our data and calculations, IQ paying members is likely to be between 100M and 101M, vs. 96.8M in 1Q19. The total number of actively viewed content decreased 7.1% Y/Y and 5.7% Q/Q in 2Q19E (*Figure 1*). The total number of in-house contents increased 116.4% Y/Y and decreased 3.8% Q/Q in 2Q19E (*Figure 2*).
- **Expect 2Q19 to be better in terms of net earnings** – BIDU's sales marketing spending hiked in 1Q19 for the sake of promoting mobile content. While the sales and marketing continued, we believe the amount was back to normal in 2Q19. In addition, the less content release by IQ is positive for content cost. Therefore, we do believe consensus non-GAAP EPS at RMB6.08 is conservative.
- **Dial-in information** - BIDU will report 2Q19 results on August 19th after the markets close followed by a 9:15pm EST conference call, which can be accessed by dialing 845-675-0437 with the passcode 9480017.
- **Please see page 2 for a discussion of valuation and risks.**

BIDU: Buy
Price: $97.38 (Intraday)
Target Price: $135.00 (was $220.00)

52 Week Range:	**$96.26 - $234.88**
Market Cap:	**$34.1B**
Avg. Daily Vol. (100 day):	**4,394,495**
Net cash per share:	**$30.80**

FY (Dec)	2018A	2019E	2020E
Q1	20,907A	24,123A	24,847E
Q2	25,972A	25,866E	27,914E
Q3	28,203A	26,859E	30,669E
Q4	27,195A	27,026E	31,681E
Net Revenue	102,277A	103,874E	115,111E
Q1	13.03A	2.77A	(1.72)E
Q2	21.06A	7.35E	1.43E
Q3	19.01A	5.29E	5.05E
Q4	13.18A	5.28E	3.45E
EPS*	66.28A	19.68E	8.22E
P/E	10.0x	33.2x	79.5x

Non-GAAP EPS
All figures in RMB millions unless otherwise noted

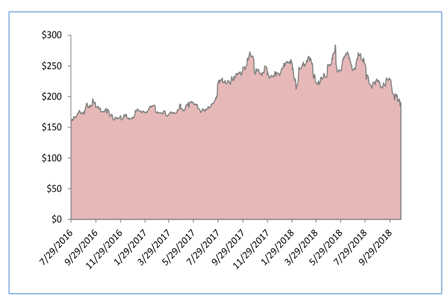

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Figure 1: iQiyi: Number of Actively Viewed Content, 1/2018 – 5/2019

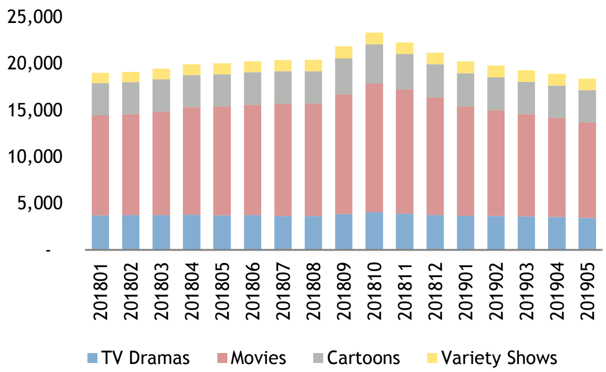
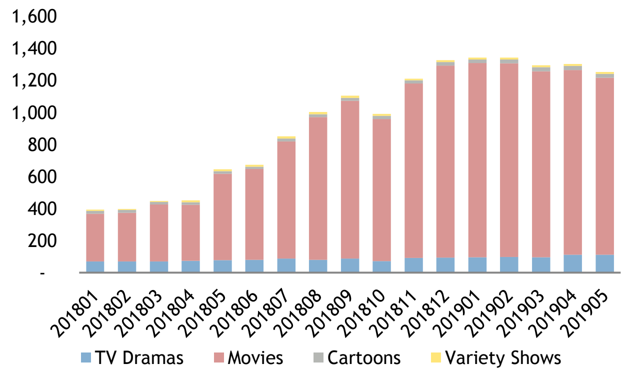


Figure 2: iQiyi: Number of Actively Viewed In-House Content, 1/2018 – 5/2019



Source: T.H. Data (www.thdata.com)

- **Valuation** – 2019 is a challenging year and it is also a year of investing. On both fronts of news feed business as well as auto-pilot driving business, the investments are necessary and lasting. Therefore, margins are likely to be under pressure. In addition to the margin issue, the topline growth is likely to be impacted by the 1) clean-up of medical sector advertising, 2) macro slowdown; and 3) competition from ByteDance. Therefore we are cautious on short term financial performance. However, we believe the investment in 2019 is positive for BIDU's future. As such, we maintain our Buy rating but lower our PT from $220.00 to $135.00, which is based on a 20.6X PE multiple to consensus 2020E non-GAAP EPS estimate of $6.54. Our prior PT was based on a 20.7X PE multiple to the previous consensus 2020E non-GAAP EPS estimate of $10.62.
- **Risks** – 1) The growth of news feed business requires more investments with less returns in near term; 2) Possibility of failure in AI initiatives; 3) Losing its edge in mobile search or news feed if other competing products take off; 4) PC monetization declines faster than expected; 5) Margin contraction due to the investments in AI and IQ content; and 6) Macroeconomic slowdown in China.

Figure 3: Earnings Model (in RMB Mlns, except per share)

	FY17A	FY18A	1Q19A	2Q19E	3Q19E	4Q19E	FY19E	1Q20E	2Q20E	3Q20E	4Q20E	FY20E	FY21E
	12/30/17	12/30/18	3/30/19	6/30/19	9/30/19	12/30/19	12/30/19	3/30/20	6/30/20	9/30/20	12/30/20	12/30/20	12/31/21
Income Statement (m's of RMB)													
Online marketing	73,146.0	81,912.0	17,657.0	19,260.3	19,842.0	19,643.5	76,402.8	17,710.6	20,205.7	22,274.7	22,807.0	82,998.1	92,077.1
Other services	11,663.0	20,365.0	6,466.0	6,605.8	7,016.7	7,382.6	27,471.1	7,136.1	7,708.6	8,394.5	8,873.8	32,113.0	35,019.0
Total revenue	**84,809.0**	**102,277.0**	**24,123.0**	**25,866.1**	**26,858.7**	**27,026.1**	**103,873.9**	**24,846.7**	**27,914.3**	**30,669.3**	**31,680.8**	**115,111.1**	**127,096.0**
COGS	43,062.3	51,744.0	14,839.0	16,166.9	17,385.7	17,609.9	66,001.5	17,394.3	18,000.3	18,452.3	18,604.2	72,451.2	75,646.7
Gross Profit	**41,746.7**	**50,533.0**	**9,284.0**	**9,699.2**	**9,473.0**	**9,416.2**	**37,872.4**	**7,452.4**	**9,914.0**	**12,217.0**	**13,076.5**	**42,659.9**	**51,449.3**
SG&A	13,128.0	19,231.0	6,054.0	6,414.8	5,592.0	5,945.7	24,006.5	7,155.8	7,676.4	8,280.7	9,060.7	32,173.7	35,068.8
R&D	12,928.0	15,772.0	4,166.0	4,252.4	4,297.4	4,243.1	16,958.9	3,925.8	4,270.9	4,600.4	5,290.7	18,087.7	19,729.9
Operating expenses	26,056.0	35,003.0	10,220.0	10,667.2	9,889.4	10,188.8	40,965.4	11,081.6	11,947.3	12,881.1	14,351.4	50,261.4	54,798.7
Operating income	**15,690.7**	**15,530.0**	**(936.0)**	**(968.0)**	**(416.3)**	**(772.7)**	**(3,093.0)**	**(3,629.2)**	**(2,033.3)**	**(664.1)**	**(1,274.9)**	**(7,601.5)**	**(3,349.4)**
iQiyi	**(3,953.0)**	**(8,306.2)**	**(2,026.0)**	**(2,049.7)**	**(2,858.0)**	**(2,434.4)**	**(9,368.0)**	**(1,473.6)**	**(1,173.2)**	**(1,269.7)**	**(1,081.1)**	**(4,997.6)**	**(2,112.8)**
Inter-Segment	**(204.0)**	**28.0**	**(1.0)**				**(1.0)**					**-**	**-**
Search and others	**19,846.7**	**23,808.2**	**1,091.0**	**1,081.7**	**2,441.6**	**1,661.7**	**6,276.0**	**(2,155.6)**	**(860.1)**	**605.5**	**(193.7)**	**(2,604.0)**	**(1,236.6)**
Non-GAAP Operating income	**18,935.6**	**20,020.0**	**156.0**	**174.0**	**775.7**	**469.3**	**1,575.0**	**(2,362.2)**	**(716.3)**	**702.9**	**142.1**	**(2,233.5)**	**2,718.6**
Net other income	**5,592.0**	**11,795.0**	**900.0**	**569.4**	**229.1**	**233.6**	**1,932.0**	**185.4**	**93.0**	**131.0**	**139.4**	**548.8**	**2,481.5**
Pretax income	**21,282.7**	**27,325.0**	**(36.0)**	**(398.6)**	**(187.2)**	**(539.1)**	**(1,160.9)**	**(3,443.8)**	**(1,940.3)**	**(533.1)**	**(1,135.5)**	**(7,052.7)**	**(867.9)**
Income taxes (benefit)	2,995.0	4,743.0	294.0	(69.8)	(32.8)	(94.3)	97.1	(602.7)	(339.6)	(93.3)	(198.7)	(1,234.2)	(151.9)
Net income	**18,287.7**	**22,582.0**	**(330.0)**	**(328.8)**	**(154.5)**	**(444.8)**	**(1,258.1)**	**(2,841.2)**	**(1,600.7)**	**(439.8)**	**(936.8)**	**(5,818.5)**	**(716.0)**
Non-controlling interest	(13.0)	(4,991.0)	(3.0)	(1,406.9)	(814.3)	(1,052.7)	(3,277.0)	(971.7)	(787.1)	(846.2)	(730.3)	(3,335.4)	(1,552.3)
Net income attributable to Baidu	**18,300.7**	**27,573.0**	**(327.0)**	**1,078.1**	**659.9**	**607.9**	**2,018.9**	**(1,869.4)**	**(813.6)**	**406.4**	**(206.5)**	**(2,483.1)**	**836.3**
SBC	3,244.8	4,490.0	1,092.0	1,142.0	1,192.0	1,242.0	4,668.0	1,267.0	1,317.0	1,367.0	1,417.0	5,368.0	6,068.0
Non-GAAP net income	**18,080.0**	**23,674.0**	**967.0**	**2,220.1**	**1,851.9**	**1,849.9**	**6,888.9**	**(602.4)**	**503.4**	**1,773.4**	**1,210.5**	**2,884.9**	**6,904.3**
GAAP EPS, diluted	52.41	78.03	(0.91)	3.08	1.88	1.74	5.80	(5.33)	(2.32)	1.16	(0.59)	(7.08)	2.38
Non-GAAP EPS	**51.71**	**67.28**	**2.77**	**6.35**	**5.29**	**5.28**	**19.68**	**(1.72)**	**1.44**	**5.05**	**3.45**	**8.22**	**19.64**
ADSs, diluted	349.5	351.7	349.7	349.9	350.1	350.3	350.0	350.5	350.7	350.9	351.1	350.8	351.6
Margins													
COGS	**53.8%**	**50.6%**	61.5%	62.5%	64.7%	65.2%	63.5%	70.0%	64.5%	60.2%	58.7%	62.9%	59.5%
Gross Profit	**52.2%**	**49.4%**	**38.5%**	**37.5%**	**35.3%**	**34.8%**	**36.5%**	**30.0%**	**35.5%**	**39.8%**	**41.3%**	**37.1%**	**40.5%**
SG&A	16.4%	18.8%	25.1%	24.8%	20.8%	22.0%	23.1%	28.8%	27.5%	27.0%	28.6%	28.0%	27.6%
R&D	16.2%	15.4%	17.3%	16.4%	16.0%	15.7%	16.3%	15.8%	15.3%	15.0%	16.7%	15.7%	15.5%
Operating expenses	32.6%	34.2%	42.4%	41.2%	36.8%	37.7%	39.4%	44.6%	42.8%	42.0%	45.3%	43.7%	43.1%
Operating income	**19.6%**	**15.2%**	**-3.9%**	**-3.7%**	**-1.6%**	**-2.9%**	**-3.0%**	**-14.6%**	**-7.3%**	**-2.2%**	**-4.0%**	**-6.6%**	**-2.6%**
Non-GAAP Operating Margin	**23.7%**	**19.6%**	**0.6%**	**0.7%**	**2.9%**	**1.7%**	**1.5%**	**-9.5%**	**-2.6%**	**2.3%**	**0.4%**	**-1.9%**	**2.1%**
Interest income	1.9%	2.5%	1.6%	1.5%	1.6%	1.6%	1.6%	1.8%	1.7%	1.6%	1.6%	1.7%	1.7%
Foreign exchange loss	0.0%	-0.1%	-1.3%	-1.3%	-1.3%	-1.3%	-1.3%	-1.3%	-1.3%	-1.3%	-1.3%	-1.3%	0.1%
Other, net	5.1%	9.2%	7.0%	3.0%	1.0%	1.0%	2.9%	1.6%	1.2%	1.3%	1.2%	1.3%	1.3%
Loss from equity method investments	-0.1%	-0.1%	-3.6%	-1.0%	-0.4%	-0.5%	-1.3%	-1.4%	-1.2%	-1.2%	-1.1%	-1.2%	-1.1%
Net other income	**7.0%**	**11.5%**	**3.7%**	**2.2%**	**0.9%**	**0.9%**	**1.9%**	**0.7%**	**0.3%**	**0.4%**	**0.4%**	**0.5%**	**2.0%**
Pretax income	**26.6%**	**26.7%**	**-0.1%**	**-1.5%**	**-0.7%**	**-2.0%**	**-1.1%**	**-13.9%**	**-7.0%**	**-1.7%**	**-3.6%**	**-6.1%**	**-0.7%**
Income taxes	14.1%	17.4%	816.7%	17.5%	17.5%	17.5%	-8.4%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%
Net income	**22.8%**	**22.1%**	**-1.4%**	**-1.3%**	**-0.6%**	**-1.6%**	**-1.2%**	**-11.4%**	**-5.7%**	**-1.4%**	**-3.0%**	**-5.1%**	**-0.6%**
SBC	4.1%	4.4%	4.5%	4.4%	4.4%	4.6%	4.5%	5.1%	4.7%	4.5%	4.5%	4.7%	4.8%
Non-GAAP net income	**22.6%**	**23.1%**	**4.0%**	**8.6%**	**6.9%**	**6.8%**	**6.6%**	**-2.4%**	**1.8%**	**5.8%**	**3.8%**	**2.5%**	**5.4%**
Y/Y Growth													
Online marketing	13.4%	12.0%	2.8%	-8.6%	-11.7%	-7.3%	-6.7%	0.3%	4.9%	12.3%	16.1%	8.6%	10.9%
Other services	93.6%	74.6%	73.0%	34.6%	22.6%	23.1%	34.9%	10.4%	16.7%	19.6%	20.2%	16.9%	9.0%
Net revenue	**25.5%**	**27.8%**	**15.4%**	**-0.4%**	**-4.8%**	**-0.6%**	**1.6%**	**3.0%**	**7.9%**	**14.2%**	**17.2%**	**10.8%**	**10.4%**
COGS	22.1%	20.2%	49.8%	34.6%	22.3%	12.8%	27.6%	17.2%	11.3%	6.1%	5.6%	9.8%	4.4%
Gross Profit	**18.4%**	**21.0%**	**-15.6%**	**-30.5%**	**-32.3%**	**-18.7%**	**-25.1%**	**-19.7%**	**2.2%**	**29.0%**	**38.9%**	**12.6%**	**20.6%**
SG&A	-12.9%	46.5%	92.7%	42.4%	-0.9%	0.0%	24.8%	18.2%	19.7%	48.1%	52.4%	34.0%	9.0%
R&D	27.4%	22.0%	26.5%	5.4%	9.7%	-6.3%	7.5%	-5.8%	0.4%	7.1%	24.7%	6.7%	9.1%
Operating expenses	3.3%	34.3%	58.8%	24.9%	3.5%	-2.7%	17.0%	8.4%	12.0%	30.3%	40.9%	22.7%	9.0%
Operating income	**56.1%**	**-1.0%**	**-120.5%**	**-117.9%**	**-109.4%**	**-169.5%**	**-119.9%**	**-287.7%**	**-110.1%**	**-59.5%**	**-65.0%**	**-145.8%**	**55.9%**
Net income	**57.7%**	**23.5%**	**-105.9%**	**-106.5%**	**-101.4%**	**-178.3%**	**-105.6%**	**-761.0%**	**-386.8%**	**-184.7%**	**-110.6%**	**-362.5%**	**87.7%**
SBC	84.4%	38.4%	40.4%	2.2%	3.6%	-14.0%	4.0%	16.0%	15.3%	14.7%	14.1%	15.0%	13.0%
Q/Q Growth													
Online marketing			-16.7%	9.1%	3.0%	-1.0%		-9.8%	14.1%	10.2%	2.4%		
Other services			7.8%	2.2%	6.2%	5.2%		-3.3%	8.0%	8.9%	5.7%		
Net revenue			**-11.3%**	**7.2%**	**3.8%**	**0.6%**		**-8.1%**	**12.3%**	**9.9%**	**3.3%**		
COGS			-4.9%	8.9%	7.5%	1.3%		-1.2%	3.5%	2.5%	0.8%		
Gross Profit			**-19.9%**	**4.5%**	**-2.3%**	**-0.6%**		**-20.9%**	**33.0%**	**23.2%**	**7.0%**		
SG&A			1.9%	6.0%	-12.8%	6.3%		20.4%	7.3%	7.9%	9.4%		
R&D			-8.0%	2.1%	1.1%	-1.3%		-7.5%	8.8%	7.7%	15.0%		
Operating expenses			-2.4%	4.4%	-7.3%	3.0%		8.8%	7.8%	7.8%	11.4%		
Operating income			**-186.2%**	**-3.4%**	**-57.0%**	**-85.6%**		**-369.7%**	**44.0%**	**67.3%**	**-92.0%**		
Net income			**-159.5%**	**0.4%**	**-53.0%**	**-187.9%**		**-538.8%**	**43.7%**	**72.5%**	**-113.0%**		
SBC			-24.4%	4.6%	4.4%	4.2%		2.0%	3.9%	3.8%	3.7%		

Source: Company data and T.H. Capital, LLC estimates

Important Disclosures

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I, Tian X. Hou, am the Primary Analyst responsible for this research report accurately reflect my personal views about any and all of the subject securities or issuers as of the date of the report. No part of my compensation was, is, or will be directly or indirectly related to the specific recommendations or views I expressed in this research report.

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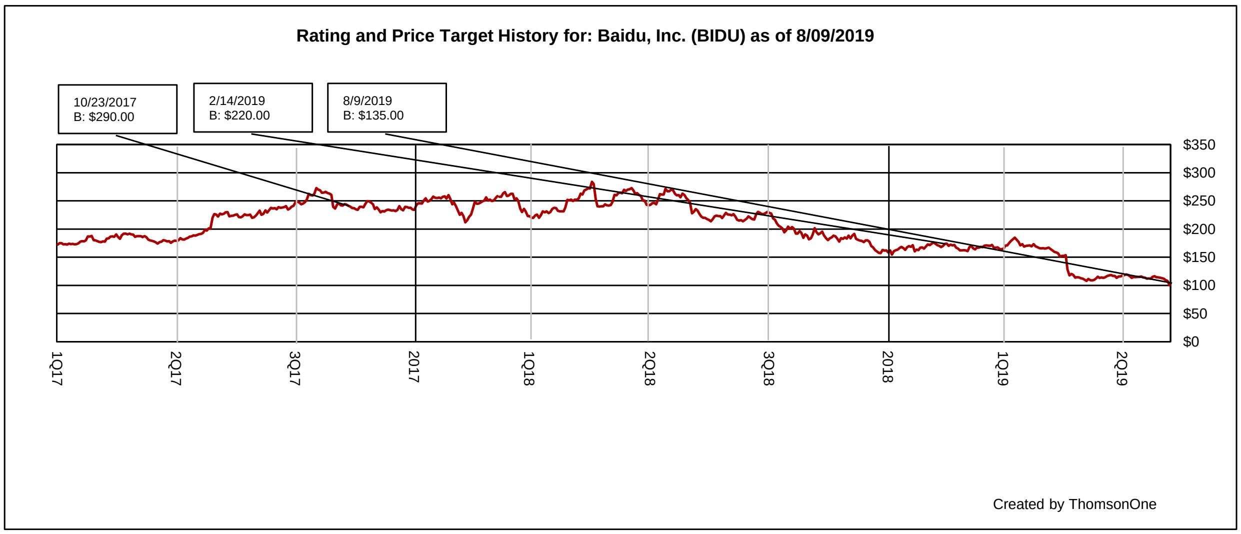

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HOLD – A stock that is not expected to appreciate or depreciate meaningfully over the next 12 months.

Expected absolute returns are based on share price at market close unless otherwise stated. Stock recommendations are based on absolute upside (downside) and have a 12-month horizon. Our target price represents the fair value of the stock based upon the analyst's discretion. We note that future price fluctuations could lead to a temporary mismatch between upside/downside for a stock and our recommendation.

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