

2017 1H Performance

For the 1st half 2017, our result is in line with S&P 500 with a gross return of 9.48%:

	2017 1Q	2017 2Q	YTD
Gross Return	3.82%	5.45%	9.48%
S&P 500	6.07%	3.08%	9.34%

Level 3, Tencent and our new holding in Amazon contribute majority of our gains. Berkshire Hathaway and other financials names are up slightly in the 1st half. As we said in last letter, we gradually increased our shares in technology companies. Tech sector now counts for 33.4% our portfolio. During 1st half, we maintain a high cash position as US market multiple keeps expanding and risk reward is diminishing. Our average cash position for the 1st half is 20.9% and we ended quarter with 24.3% cash. While high cash position certainly drag down our results, we believe it will benefit us if the market returns to historical volatility.

Existing holdings:

- Berkshire Hathaway:

Berkshire Hathaway returned 3.9% for the 1st half. We added back our shares in Berkshire in the 2nd quarter as its price fell. Several favorable developments in 1st half boost Berkshire's two pillar of value: investments and operating earnings. First, the \$10 billion retroactive insurance deal with AIG materially increased Berkshire's float. Second, most of Berkshire's large equity holdings continued to increase in value, notably Apple and Bank of America. Third and most importantly, all Berkshire's key operating businesses, including retail, proved that they can grow earnings consistently amid technology disruption. More recently, Berkshire struck a deal to buy Oncor for \$18.1 billion enterprise value after Texas Utility Commission blocked Nextra's proposed take-over. The deal is not guaranteed to go through as Elliot management and other creditors try to push for a higher valuation. Nonetheless, we believe Berkshire's energy business will one day become its largest profit center as it can grow both organically or through acquisitions, in the meantime, saving Berkshire billions in tax. Even after the Oncor deal, Berkshire's cash position is still certain to top \$100 billion by the end of 2017 without another major acquisition. We estimate that if Berkshire's A share stay flat at \$250k by the end of 2017, its price/book value will fell below 1.35x, an attractive price for long term shareholders.

- Interactive Broker:

Interactive broker returned 2.5% in the 1st half. The company faced several industry headwinds during the period: a commission price war among discount brokerage firms, historical low volatility, and disposal of its market-making business. Given all the challenges, we are very pleased that IBKR's brokerage arm continue to report solid operating metrics. Since the

beginning of 2017, the company has grown its total account by 11.1% and client equity by 22.6%. Total cleared DARTS also rebound to 633K, a 7.2% yoy increase. Even after the price war, IBKR's commission price and margin loan rate remain considerably lower than its peers. We view IBKR as a technology company because of its intense focus on bringing the benefits of automation to its customers. While we cannot underestimate Charles Swab ability to reduce commission price to zero given their large interest-sensitive asset base, our ongoing research shows that IBKR expansion in its most profitable customer bases, such as hedge funds and financial advisors, remain solid.

Level 3:

We sold all our shares in Level 3 at an average price of \$61.1. We recognized a 24.9% short term gain. Originally, we intend to hold on our shares after the CenturyLink merger. During 2nd quarter, Activist Corvex successfully persuaded the board to promote Level 3 CEO Jeffrey Storey to lead the company after the merger. Jeffrey Storey's track record of creating shareholder value speaks for itself. We, however, sold our shares after the recent sales scandal in CenturyLink consumer broadband business broke out in mid - June. Since then, there are several lawsuits been filed in different states for similar matter. Short interest also skyrocket to 21%. While there may be some powerful short sellers behind the recent lawsuits, bad customer service is always an alert if not addressed quickly. Our original thesis that the combined company can maintain its dividend and increase their enterprise market share remain unchanged. We will buy CTL stocks if risk reward become more attractive.

- Tencent

Tencent returned 48.5% during 1st half. As digital economy take off in China, Tencent is firing on all cylinders. The company grew its revenue by 48% in 2016 and 55% in 1Q/2017. An unbelievable figure given the size of the company. While we brought the share based on the thesis that Tencent company are rapidly expanding into payment and other adjacent businesses, the key driver behind the recent share price rally is from its core gaming business.

Tencent lose some share to Netease in 2016 as it lacks hard core mobile game IPs. The story quickly turned when one mega hit, Honor of Kings, took off in China. In a recent statistic from 3rd party, it is estimated that Honor of Kings has 163 monthly active users, 54 million daily active users, and a monthly gross revenue of \$440M. If Tencent can sustain its monthly revenue, Honor of Kings alone can rival the size of NetEase or Activision Blizzard. The outsized impact of Honor of Kings, however, give the stock more volatility. State media recently criticizes the game is too addictive for students. The shares went down 5% on the news. Historically, Tencent is very professional at addressing government regulation. It quickly implements changes to its gaming community to restrict hours that can be played by non-adult player. We are monitoring the situation closely. Fundamentally, we believe mobile MOBA game and eSports as a general will continue to gain mainstream popularity as better network speeds enable rich gaming experience. Tencent is also actively building a more vibrant community for

gamers through heavy investments in new leagues, tournaments, steaming platforms, and a possible theme park.

- Others:

In January, I made a dumb decision by selling out our position in Microsoft at \$62.2 as I began buying other tech names. I could simply use our excess cash. The stock has since appreciated to \$70, instead, we are left with a tax payment. We also mildly trim our position in Wells Fargo.

New Holdings:

- Amazon:

We significantly increased our share in Amazon in the beginning of the year. Our averaged price paid is now \$790. Last letter we discussed that US tech giants hasn't yet flex its muscle in expanding into traditional industries like their Chinese peers do. We are glad that Amazon is taking the first major step to in buying Wholefoods. The move is applauded by shareholders of its impeccable timing and rational. We wouldn't surprise if Amazon can grow Wholefoods footprint to more than 1000 stores from current 464 store base as Wholefood only counts for 1.2% of US grocery market. As Amazon prime members grows, we are seeing a gradual change of Amazon retail model from "selling everything" to "connecting users", examples include Alexa and Prime festival. An acquisition of Wholefood is a natural extend of this transition.

While Amazon always seem to be overvalued on the current business model because of thin margin, the valuation is easier to calculate as Amazon has now built up three lucrative and sticky businesses: AWS, Marketplace and Prime. In 2016, Amazon generated an operating cash flow of \$16.4B and free cash flow of \$9.7B, even after pouring a magnitude higher spending than almost all its rivals. See the following charts for Amazon's spending in R&D, content and advertising versus competitors:

- Amazon's R&D/Content spending versus competitors:

	2013	2014	2015	2016	CAGR
Amazon	6,565	9,275	12,540	16,085	35%
Alphabet	7,137	9,832	12,282	13,948	25%
Microsoft (FY)	10,411	11,381	12,046	11,988	4.7%
Oracle (FY)	4,850	5,151	5,524	5,757	5.9%

- Amazon's advertising spending (exclude payroll) versus competitors

	2013	2014	2015	2016	CAGR
Amazon	2,400	3,300	3,800	5,000	28%
Netflix:	438	533	714	842	24%

Microsoft (FY)	2,600	1600	1,900	2,300	-4%
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Even after the heavy spending, Amazon's free cash flow continues to mushroom, and we haven't even digested into Amazon's enormous CAPEX budget:

	2013	2014	2015	2016	CAGR
Operating cash Flow:	5,475	6,842	11,920	16,443	44%
Free Cash flow:	2,031	1,949	7,331	9,706	68%

We believe Amazon's ballooning cash flow is just getting started. We estimate that by 2020, AWS, Market and Prime can generate an additional \$15B to \$20B cash flow than 2016 that can be used for Amazon to reinvested into other verticals: advertising, auto parts, eSports, furniture, offline grocery, wireless services, etc. The list goes on and on.

- Alphabet:

We initiated a major position in Alphabet at an average price of \$876. We brought the shares based on two reasons: solid fundamentals and AI singularity. The core Google business is as strong as ever. In 1Q/17, It demonstrates another reaccelerate growth of 22%, a trend we are seeing consistently over the last year. We estimate that the core Google business can generate at least \$60B non-GAAP operating income by 2020 as it monetizes large properties such as Youtube and PlayStore at scale. In the meantime, it will only grow its share outstanding by 5%. The valuation is attractive given a current market cap of \$636 billion (as of 06/30).

The future of Alphabet, in our view, depend of its ability to extend its lead in AI. We believe the AI trend will be much bigger than the last major tech trend: mobile. As Google centralize all its business groups around AI, we are clearly witnessing better user experience cross their properties, from search results, to YouTube suggestions, and to new applications such as Google assistant and Google lens. More important, AI will also help Google expand into areas such as self-driving car, healthcare or basic material that is hard to crack the code by other tech giants. Since last year, one buzz word constant quote by Softbank visionary CEO Masayoshi Son is "singularity". It is a hypothesis that AI will abruptly trigger runaway technological growth that a machine can on day be millions of times intelligent than human being. While we certainly could not predict eventual outcome, we believe the company controls the best AI technology will benefit the most. And Google is number one on the list by a long shot. If we can't beat it, we just join it.

Thoughts on technology holdings:

It is increasingly obvious to us that tech giants are redistributing wealth for the society. We have talked intensely about the thesis of owning tech companies that has a natural advantage

to expand into adjacent businesses. The reason is straight forward: by expanding into adjacent business, tech companies can extend their long-term growth rate as core businesses reach maturity. Think of in a DCF model that if the terminal growth rate is higher than its discount rate, it essentially put the valuation of a company at infinity. Four companies stand out in our list: Alphabet, Amazon, Alibaba and Tencent. So far, we own shares in three of them.

Our large holdings in tech, however, does not come without risks. Several risks that top our mind are: intensified competitions among tech giants, government regulations, and correlations among their stock performance. Our result will be more volatile as we now have one third of asset in tech giants. On the other hand, we are comfortable with their valuation as we see clear path of increasing earning power.

Distressed Assets:

As discussed in the last letter, we believe many traditional industries will face disruption from technology in the next few years. During the 1st half, we already witness sell-off in industries such as retails (-7%) and telecom (-10.7%). Many individual stocks are down significantly more than their indexes. Once industry darlings, some of these companies are quickly losing favor: Advance Auto Parts down 39%, L Brands down 29%, Kimco Realty down 29%, and WW grainer down 23%. *(Price at 07/07/17)* We, however, think some companies are unfairly punished by the fear of tech disruption. We are seeing opportunities in select pockets in auto, cable and real estate industries. We will initiate positions if risk reward is in our favor. One thing for sure is that you can count on us to stay away from companies that are facing secular decline and have any possibility of catastrophic loss.

Conclusion:

The future earnings growth of tech giants, coupled with a foreseeable low long term interest rate, has set a high hurdle rate of return when we are searching for new ideas. Nonetheless, we will act quickly if attractive names, whether micro-cap or large cap, fits into our risk reward criteria. In the meantime, we will stick with our number one priority of preserving capital for our investors. We look forward to report to you again by the end of the year.