JAG CAPITAL MANAGEMENT LLC

QUARTERLY COMMENTARY
2nd Quarter 2018

Large Cap Growth

*Performance	2Q	YTD
Pure Gross	6.04%	9.89%
Net	5.45%	8.69%
Russell 1000 Growth	5.76%	7.25%
S&P 500 TR	3.43%	2.65%

PERFORMANCE REVIEW

Equity markets rebounded during the 2nd quarter, despite chaotic newsflow highlighted by rising energy prices, a flattening Treasury yield curve, turmoil in emerging markets, President Trump's tariff policies, and growing fears of a trade war between the US and China. The S&P 500 successfully navigated all this noise to generate a quarterly gain of roughly 3%. This left the benchmark index with a 2.7% year-to-date return, albeit still roughly 5.5% below its January peak.

Our Large Cap Growth strategy performed relatively well compared to both the S&P 500 and the Russell 1000 Growth Index last quarter. Somewhat unusually, we did better with our sector allocations than our stock selections. Our single best decision was to remain significantly underweight the Industrial Sector, which was the worst-performing group last quarter. Note that we are bottom-up stock pickers, so our caution on Industrials stems from our views of individual company characteristics and fundamentals rather than a "top-down" view of the economy or the markets. Unfortunately, many Industrials companies are manufacturers selling into global markets, so they sit in the cross-hairs of tariff threats, the strong dollar, and rising input costs. This is an unappetizing "triple threat" for our growth-oriented investment approach. In any event, we currently own only one Industrial stock in the portfolio (Waste Connections, WCN), leaving us with 2.4% exposure to a sector that has a 12% weighting in the Russell 1000 Growth Index.

Our portfolio's top three contributors last quarter were Netflix (NFLX), Align Technologies (ALGN) and Twilio (TWLO). A portfolio holding since October 2016, NFLX is building a global, subscription-based media content platform and is a prime beneficiary of the secular – and accelerating - trend away from cable and satellite providers. ALGN is the market leader in clear tooth alignment systems, which replace traditional brackets and braces. Although the company previously focused on adult cases, they have been able to establish a strong foothold in the much-larger market for teenage orthodontia. Our position in Twilio (TWLO) was established in March 2018. Although the company is hardly a household name, they are the leader of the rapidly-growing cloud communications platform industry. They sell their products into large enterprises that have a need for a global and dependable cloud-based software to manage voice and text-based contact centers. TWLO is also growing revenues at an annual clip of over 40% per year, while outperforming expectations on gross margin. We like fast-growing companies with pricing power that are targeting large addressable markets.

Amazon (AMZN) was our fourth-biggest portfolio contributor during the second quarter. Our current position in the stock was first established in mid-2015, and we continue to like the company's prospects. We think investors may be underestimating AMZN's long-term growth opportunities, particularly in international markets. According to a recent research report from Doug Anmuth at JP Morgan, there were $14.3 trillion of global retail sales in 2017. E-commerce sales represented $1.8 trillion, or 12.6% of this total. Although the United States is the world's largest economy, appoximately 75% of global retail sales and 67% of global e-commerce sales happen outside the U.S. Only 1/3 of Amazon's retail sales occur in international markets, and Anmuth estimates that Amazon currently has a 9% market share of international e-commerce sales. Putting it all together, JP Morgan thinks that AMZN's international retail sales could more than double over the next several years, from $106 billion in 2017 to $262 billion in 2022. We think that could prove to be a conservative estimate, especially if the global economy avoids a severe recession in the interim.

*Returns are presented gross and net of fees and include the reinvestment of all income. PAST PERFORMANCE SHOULD NOT BE CONSIDERED INDICATIVE OF FUTURE PERFORMANCE. Please refer to our 2Q '18 full performance disclosure for additional information. Gross returns are shown as supplemental information, as bundled/wrap fee accounts are stated gross of all fees and transaction costs. Net of fee performance was calculated using the highest applicable annual wrap fee during the applicable performance period, applied monthly. Wrap fee schedules are provided by independent wrap sponsors and are available upon request from the respective wrap sponsor. Other than brokerage commissions, bundled/wrap fees include investment management, portfolio monitoring, consulting services and, in some cases, custodial services. Highest annual wrap fee used for Net of fee performance calculations may differ from fees listed in this paragraph due to the fee schedule of the sponsoring firm.

MARKET OUTLOOK

Somewhat paradoxically, the combination of very strong corporate earnings growth and small gains for stocks has resulted in equity multiple compression as we enter the back half of 2018. To wit, the S&P 500's forward P/E ratio compressed from 20x to 17x between the year-end 2017 and the end of June 2018. The index's forward earnings yield of 6% compares favorably to both 10-year Treasury yields and BAA-rated corporate bond yields. Although stocks are no longer as cheap as they were at their cyclical valuation lows in 2011, they remain attractively valued when compared to bonds.

We continue to favor innovative technology stocks, but the meaning of that statement will be changing soon. This coming September, the Telecommunications Services sector will be renamed to Communication Services. The sector will then be broadened to include companies that have historically been included in the Consumer Discretionary and Information Technology sectors. This is (literally) a big deal. Almost $3 trillion of stock market capitalization will move into the newly-named sector, including roughly $2 trillion from the Information Technology sector and another $1 trillion from the Consumer Discretionary sector. Tech behemoths like Facebook, Alphabet, and Electronic Arts will henceforth be members of the Communication Services sector, as will current Consumer Discretionary companies like Netflix, Disney and Comcast. The new sector stands to carry a weight of almost 11% in the S&P 500, and will be the fourth-biggest sector in the index. Information Technology will lose some weight, from over 26% to around 20%, but will remain the largest sector in the index. The Consumer Discretionary sector will shrink from 13% to 10%.

Investors of all stripes – passive, active, and hybrid – will be paying attention to this major reclassification. As active managers, we will be watching closely to evaluate changes to our relative portfolio exposures among the affected sectors. It would not be surprising to see some market volatility over the next few months as asset managers, institutional investors and ETF sponsors adjust their portfolios to reflect the modified sector holdings. Longer-term, we think the new GICS sector classification will better reflect the increasing convergence between communications, broadcasters, media content creators, and internet companies.

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We are encouraged by the action in the Health Care sector over the past few months. Although drug pricing policies continue to be a political football, we are seeing signs that biotechnology stocks could be on the cusp of exiting their two-year funk. We are watching this group closely and have several companies on our internal watchlist. On the other hand, we remain on the sidelines in the Energy sector, despite broad recent outperformance on the back of higher oil prices. We believe petroleum demand will slacken over the next five years as production technologies improve, as alternative forms of energy get cheaper and more efficient, and broader adoption of electric vehicles takes hold. This could result in an unpleasant combination of ample supplies and soft demand for oil, which could be painful for investors in the space. In the short- to intermediate-term, oil prices could certainly continue to move higher for any number of factors, including supply disruptions and OPEC actions. We just don't feel that we have a special "edge" to pick winners and losers in the oil patch, and until we do we will likely maintain minimal exposure.

PERFORMANCE ATTRIBUTION: 2Q 2018

Top Performing Sectors

Sector	Allocation Effect (bps)	Selection Effect (bps)	Total Effect (bps)
Industrials	+86	+20	+106
Consumer Discretionary	-13	+111	+98
Health Care	-4	+88	+84

Bottom Performing Sectors

Sector	Allocation Effect (bps)	Selection Effect (bps)	Total Effect (bps)
Financials	-53	-110	-163
Information Technology	+13	-56	-43
Materials	-5	-36	-41

Top 5 Contributing Stocks

Company	Symbol	Contribution (bps)	Comments
Netflix	NFLX	+135	Once again, Domestic and International subscriber growth impressed investors sending the stock higher.
Align Technologies	ALGN	+91	An initiative to spur Invisalign adoption among teenage patients is translating to better than expected revenue growth.
Twilio	TWLO	+91	New product launches and impressive top line guidance led the street to raise targets.
Amazon	AMZN	+74	Q1 E-Commerce growth impressed and Web Services revenue growth continues to accelerate on a massive base.
Lululemon	LULU	+73	Successfully developing a direct-to-consumer online sales channel. Expanding product offerings for men and teens.

Bottom 5 Contributing Stocks

Company	Symbol	Contribution (bps)	Comments
SEI Investments	SEIC	-61	Q1 Revenue and outlook came in short of consensus due to a project being delayed by a large customer.
Dollar Tree	DLTR	-47	Q1 results made it clear that their integration of the Family Dollar acquisition has not gone to plan.
Match Group	MTCH	-40	Facebook announced their intention to launch a competing product.
Intel	INTC	-29	Unexpected CEO exit and pressure from Chinese tariff concerns.
Micron Technologies	MU	-22	Continued worries about DRAM/NAND cycles peaking and Chinese tariff concerns.

PORTFOLIO ACTIVITY: 2Q 2018

Buys

Company	Symbol	Comments
Domino's Pizza	DPZ	We've identified home delivery as an area of growth and Domino's Pizza has a leading position in delivery. Domino's continues to improve delivery economics by shortening delivery routes and shifting 70% of their orders to an online channel.
Intel Corp	INTC	Datacenter spending is projected to double over the next 5-6 years and Intel is the share leader in chips used in cutting edge datacenters. Separately, Intel's acquisition of Mobileye has helped them become a leading player in the race for autonomous autos.
Intercontinental Exchange	ICE	ICE is a beneficiary of higher volatility the market has experienced this year. The company also operates a top 3 electronic bond trading platform in a market that is underpenetrated and poised for secular growth.
Lab Corporation	LH	Lab Corp. renewed and expanded diagnostics contracts with two large healthcare plans. We think more healthcare plans will shift their testing business to Lab Corp. in an effort to save on testing costs vs. hospital labs.
Lululemon	LULU	Lululemon is one of the few global apparel brands that has protected margin integrity by avoiding pricing promotions and outlet sales. The company's recent direct-to-consumer sales efforts are showing success.
Palo Alto Networks	PANW	Palo Alto Networks is consistently recognized as the technology leader in cyber security. We think recent business development efforts and high profile security breaches will make Palo Alto's products more attractive to chief technology officers.
Veeva Systems	VEEV	Veeva is the leader in the biopharma CRM and regulatory submission spaces, which are highly regulated. The company is successfully translating that expertise into other highly regulated areas like chemicals and packaged foods. Continued strength in their legacy business and traction in new industries is fueling impressive topline growth.
Visa Inc.	V	We like Visa as a secular growth story that will benefit from the global conversion to a cash-less economy. Also, Visa's purchase of Visa Europe has led to higher cross-border volumes, and thus higher margins.
Dollar Tree	DLTR	Dollar Tree's purchase of Family Dollar presents an opportunity to sell new items like food and alcohol in FD stores as well as upgrade FD's marketing ability. Dollar Tree has been posting positive comps and management indicated plans to grow store count.

PORTFOLIO ACTIVITY: 2Q 2018

Sells

Company	Symbol	Comments
Coty Inc.	COTY	Coty was not responding to what we perceived as positive fundamental news and experi-enced a technical breakdown.
Dollar Tree	DLTR	Dollar Tree broke technical support after reporting Q1 results that made it clear the Family Dollar acquisition was not improving as hoped.
Genpact	G	Genpact made an acquisition outside their area of expertise, lost a large mortgage client, and the stock broke down technically following a disappointing earnings report.
SEI Investments	SEIC	Q1 revenue and outlook came in short of consensus due to a project being delayed by a large customer.
Sony Corporation	SNE	Sony has made several dilutive content deals recently, leading us to question management strategy. Also, the stock failed to respond positively to news of share gains in video game hardware and software.
Match Group	MTCH	Facebook announced that they would enter the online dating business. Facebook has had success copying other companies' products in the past, so we began to question Match's longterm outlook.
Take-Two Interactive	TTWO	We were concerned about the effect the popularity of battle royale games like Fortnite would have on engagement and revenue numbers for video game publishers. We felt that Take-Two faced the highest level of risk among our video game exposure.
Vertex Pharmaceuticals	VRTX	While Vertex reported impressive Q1 earnings numbers, the stock failed to perform accordingly. We believe that Vertex was held down by broader pressure in the biopharma space, primarily fears about drug pricing pressure.
Morgan Stanley	MS	Morgan Stanley experienced a technical breakdown. We also became concerned that Deutsche Bank and emerging market economies could become sources of counterparty risk.
WestRock	WRK	WestRock failed to respond to an abundance of positive fundamental news. We believe that packaging tastes may be shifting away from paper and cardboard toward more efficient alternatives.

Disclosures

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