Long Cast
ADVISERS LLC

Dear Friends:

Cumulative returns on accounts managed by Long Cast Advisers increased 9% in 3Q18, net of applicable fees. This was mixed against the baseline market indices. Returns for separate accounts managed by LCA ranged from 4% to 16% for the quarter.

Year to date returns through September 30, 2018 are flat. Since inception nearly three years ago, we have returned a cumulative 75% net of fees. Because our portfolio is comprised of just a handful of typically very small businesses, it is expected that returns will vary considerably from the baseline.

PERFORMANCE

	LCALLC Gross*	LCALLC Net	R2000	S&P	Dow
	Annual Percentage Change				
2015 (2-mos)	12%	12%	-5%	-2%	-2%
2016	17%	16%	21%	12%	17%
2017	38%	36%	15%	22%	28%
1Q18	-1%	-1%	0%	-1%	-2%
2Q18	-7%	-7%	8%	3%	1%
3Q18	9%	9%	4%	8%	10%
YTD	0%	0%	12%	11%	9%
Cumulative chg	79%	75%	47%	47%	59%

Returns in the quarter benefitted materially from **Invuity's** sale to Stryker for $7.40 or 4x revenues. Our blended cost basis was $4.65, reflecting a 60% return over two years. This is our fourth large holding since inception to be acquired, following ARIS, SEV and CDI.

The results notwithstanding, a mistake was made on this investment that I aim to not repeat. I initially wrote up my investment thesis on IVTY in Dec 2016. I had done a lot of research around the product, the valuation and the optionality, but relied on the conventional wisdom that its CEO at the time – Phil Sawyer – was a masterful entrepreneur who'd built and sold his last company for a profit.

Wrong.

The public data showed that his last company had been a capital allocation nightmare. It took me 5 minutes to find that information once I realized to ask the question: "I wonder what his history of capital allocation is actually like."

The lesson here is to get better at asking the right questions. Last quarter I talked about developing a checklist, as I began to understand that it's not about assuring results but sharpening a repeatable process. My goal, which I briefly discuss a bit later, is to identify unique and unusual companies with wide opportunity pathways, trading as if they are in the gutter. The checklist continues to develop.

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PORTFOLIO HOLDINGS

QRHC. Management has been realigning the business away from low margin revenues towards higher margin specialty waste. These changes, along with a cyclical tailwind, suggests there is a wide success pathway towards *good* results in the near term. I own this however for the optionality - if the technology is right - to become something *great* as an asset light service provider. Meanwhile, I am paying fair prices for the enterprise. (See July report).

CTEK. This is not working the way I thought it would when I initiated my investment. However, as I recently wrote in a letter to management, reason, logic and the realities of their financial situation suggests that they should hove off the low margin slow growth MPS business and focus on healthcare IT consulting / cybersecurity. That business generates FCF with plenty of room to reinvest towards growth. People I've talked with at hospitals tell me cybersecurity is a huge issue and they are throwing money at it, but the industry remains fragmented. As with any investor, they should focus their capital on their highest return ideas.

EVI. Other smart investors have recently written about this far more eloquently than I, and in my effort to refer them to you, I searched the twitter-sphere for $EVI and noticed that there is now a wholly unrelated bitcoin called "evimeria". Strange times.

After a quiet 1H, the company has been active on the acquisition front, announcing purchases in Houston, Miami and an undisclosed company in the Western US. With a new $100M credit facility available to them, I expect this will continue to grow into something bigger and more valuable over time.

SIFY. This Indian business owns among other things, fixed data and fiber assets; an IT body shop that develops, installs and resells enterprise applications; and it builds, hosts, owns and leases data centers. India recently announced its own version of "GDPR", which will require any consumer facing internet company to host data domestically so the growth in the data center business is likely to continue.

The company operates at a profit and although the working capital management reflects domestic realities, it still generates cash. The headwinds of USD / INR exchange and emerging market sentiment have all weighed on the stock but at 6x EBITDA, it remains compelling.

PSSR deserves a mention though it is no longer in the top 5%. I bought it around the same time that I started the firm so it is from the "original vintage".

Its purchase was driven by interest in owning a company that has long been lodged in the aviation enterprise, starting as a radar seller and evolving into radar data and now data analytics for airports and airlines. They are used by five out of six major US airlines and in many domestic airports, but they are a small vendor in a large industry and have had difficulty sustaining consistent growth.

Lost contracts have twice burnt them and twice before, after periods of investment (funded by loans from the Chairman, who is a source of permanent capital), it has shown substantial growth and a substantially improved balance sheet, re-emerging … perhaps not quite as a butterfly.

We are currently at the 1.5 year mark of its latest investment cycle where the company has spent on new technology, sales and operations. They are pursuing international airports and smaller airlines that don't have the scale to invest in the fixed knowledge base and expertise PSSR has long accumulated. They reported double digit revenue growth, well short of where they need to be but potential evidence that these investments are working.

We continue to seek additional evidence to bolster our confidence. While the stock has been tough to own, if these recent investments are close to working, in a year's time, investors may reap rewards.

PORTFOLIO ADDITIONS

TableTrac (TBTC) sells casino management software (CMS). A CMS tracks cash and credit transactions at tables and electronic games for financial reporting as well as for player tracking, marketing and promotions. Every CMS needs to be approved by state regulators. The approval process is expensive and onerous and this reduces competition at the lower end of the space.

The business is dominated by four large players: Ballys (owned by Scientific Games, SGMS), Konami (KNMCY), IGT (IGT) and Aristocrat (ALL.AX). TableTrac focuses on small and mid-sized casinos notably in the tribal gaming market, a niche that helps it compete in a larger industry. We recently attended the Global Gaming Exposition in Las Vegas, *the* annual gaming event, and TBTC seems to be the only small player outside of the big four with state approvals.

It is growing yet trades at half the median valuation of these larger competitors. Growth is driven by regulatory approval in new states, notably Nevada, which offers the opportunity to expand into the largest US market, as well as by cherry picking small casinos coming off contracts with some of the larger vendors.

The company competes on price, which offers a faster ROI to the customer, and on service, which smaller casinos don't tend to get from larger vendors. The company is dedicated to customer service.

Theirs is not a SaaS business. A system is installed, sold and owned by the customers. After the sale, there is a monthly customer service fee charged to the customer based on the number of games and tables managed. This "service and maintenance" fee is a recurring revenue.

By growing its installed base the company grows its recurring revenues. The P&L seems to indicate a company nearing scale, where the recurring revenues alone could cover overhead. Its valuation seems cheap not only relative to its "peer group" but relative even to mediocre software vendors.

Finally, the company falls under the category of "owner / operator". The CEO Chad Hoehne founded the company in the mid-'90's and owns nearly 30%. He's tried in the past (with poor success) to hire outside managers to run the business. After rotating through two relatively recent CEO's, he's back in charge alongside a new CFO, Randy Gerber, hired earlier this year. Randy has substantial public company audit experience and interestingly to us, is a long-time shareholder in the company.

Obviously, I don't know the future, but it seems to us an attractive business that solves a tangible problem for its customers at a price they're willing to pay and at a valuation that ignores the opportunity.

DATA I/O (DAIO). This essay written by the company's CTO explains in some detail the range of problems the company solves for customers. It is however, nearly impossible to read, which I think speaks to some of the problem the company has with investors.

DAIO sells capital equipment to program microchips and microcontrollers. If you studied programming or electrical engineering you likely at some point had to program a chip, probably using some small tabletop device. If you did not, just know that every digital device has within it a microcontroller that is programmed with some firmware that "wakes the chip up", tells it "you're a chip" and enables the chip to accept future commands. Chip programming is an essential gateway in a chip's life.

Chip programming is a mature industry. Chips have been around for a long time, chip programming has been around a long time and equipment for programming chips has been around for a long time. An ex-CEO of a small electronics company – ie a buyer of programmed chips – told me this about the chip programming industry:

"It's very simple to load application programs into micro controllers at scale. It's been done for 40 plus years since microcontrollers came to market. There is nothing new or difficult here. This is old old old undifferentiated stuff you are exploring. Good if it's just personal curiosity. Irrelevant to contemporary trends and issues."

It's a wonderful baseline if you consider other industries that once shared these characteristics but where one company, on the strength of a focused strategy, precise implementation and terrific management, put space between themselves and the competition, and came to dominate it. It's no wonder that DAIO is valued as if it's a fair business in a mature and fragmented industry.

We see changes on the horizon.

First of all, financial history indicates this is a very well managed company. CEO Anthony Ambrose took over in 2012, restructured, cut costs, invested in upgrading machines and focused the sales efforts on niche markets. The P&L under his tenure shows a slow steady progression of improving sales and BVPS while reducing (and holding) SG&A to below 30% and continued self-funding of R&D.

As a result of this focus, the company is growing share in the important automotive market. We are in an era of more devices with more chips and more information on these chips, particularly in automobiles. This has increased the need for electronics suppliers to the automotive industry to provide better, faster and more reliable for chip programming equipment. The upgrades have allowed Ambrose to put some distance between himself and its competitors.

Finally, there is an effort in the semi-conductor industry to secure chips using some of the same cryptographic tools used in securing communications (public and private keys, certificates, validation and other forms of authentication). The term for this is “Embedded Trust” or “Root of Trust”. The industry-wide issue is bringing the technology to market at scale and at a reasonable cost for consumer electronic adoption.

DAIO management is approaching this problem in a novel and fascinating way. Under the brand “SentriX” they are partnering with firms that offer security related IP, licensing the IP exclusively, packaging it as a platform (IP + their programmer) then giving (gratis, for free) the machine to the customer and charging a per unit price for a securely programmed chip, which they share with the IP provider. This solution solves problems and creates opportunities up and down the company’s ecosystem. I’ll note a few here.

- Direct customers like Avnet or Arrow or Bosch or Johnson Controls et al can offer a secure upsell with zero capital at risk.

- Since DAIO is an essential gateway in the expansion of the IP, the IP partners are aligned with marketing a large footprint for these machines.

- Getting more machines on more customer floors will put even more space between itself and its competitors. It appears to be the only programmer doing this at a scale at this moment.

- The effort enables DAIO to transition from being a piece of equipment sold, to a platform that holds the keys (cryptographic and proverbial) towards an expanding technology. To this point, it’s worth noting that one of the first IP partners, SecureThingz, was acquired by IAR Systems for $30M, on $500k of revenues. This indicates the perceived value in the technology.

- It would also enable DAIO to transition away from the cyclicality of capital goods spending towards more consistent and recurring revenues. This would offer visibility, which tends to justify a higher valuation multiples.

- The willingness to try something new and different reflects the quality of the grey matter managing the company.

In 2017, the company sold nearly two-years-worth of equipment in one. The headline “great year” followed by the 2018 negative comps lead the stock to “round trip”.

We have a more nuanced conclusion from that “great year” which we think has enduring benefits. In my view, it demonstrated the ability to articulate and successfully implement a focused strategy. Certainly, the outcome could have been completely random. But most importantly, during that growth year, the company managed its working capital with incredible acumen. That is *not* random and speaks to what we believe is an exceptionally high-quality executive team. Growth can kill. They thrived.

The company has a $40M mkt cap and nearly $20M in net cash. It manages a very conservative balance sheet. It continues to fund its own R&D. it trades at 9x annualized 2018 EBITDA, but if you normalized R&D, simply backing out the incremental investments in SentriX, it would be a 6x multiple. It just announced a $2M buyback, representing 5% of the outstanding shares. If SentriX works, we think in 3-5 years this could be a substantially larger and different company. Meanwhile, we are paying a ho hum prices of what appears to be a very well run business that can still gain share in a fragmented industry.

A payments platform company. We are still accumulating shares so will remain vague on details.

CONCLUDING THOUGHTS

Machine learning is a weak model for the human experience. I’m sure some would say “it’s not the point of AI to model the human experience,” which is true in the applied sort of way. But I think of computers as an extension of cave painting - an effort to better model, project and understand ourselves – and though technology continues to make strides, it still has a long way to go. There are layers of complexity in our 48 oz upstairs.

I’ve been thinking about the iterative processes both humans and AI utilize to “learn”. I am much more familiar with the human process where I observe clever and creative genius concurrent with stupors of idiocy. We iterate ourselves to great heights and great tragedy, pride and shame, confidence and self-flagellation, drunken stupors and modest victories. It’s totally bananas.

The point here isn’t to be cynical. I know the effort with investing is to remain hyper-rational but we can’t and shouldn’t wish away the emotional content to life or investing. It is essential to the uniqueness of both. Rather than try to mute it, we should rather be aware of and correct for our natural human tendencies so that we can retain and further the develop what is unique and unusual.

Unique and unusual retains its value over time. It’s totally incongruent with the search for “the next Buffett” or “the next …” whatever. Seek out the aspects that makes people different. We are by nature more comfortable with norms but it doesn’t make the norm the best choice available.

I don’t use AI in my investment process. I use AVI. It’s a highly qualitative competitive advantage built on +20 years investment experience and +15 years in institutional research. Through the first three years of my firm, we have indications of positive results, but it’s still early and I’m still working on articulating the process, refining the checklist, questioning the assumptions and honing the skepticism.

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I highly recommend for anyone who is on the same venture to re-read (or read for the first time) [Chapter 8 of the Psychology of Intelligence Analysis](). It is outrageous how much wider my scope of skepticism grows putting pen to paper and drawing that matrix.

As always, I appreciate your entrusting me with your capital and the responsibility associated with being its steward. If you know anyone who is seeking a small-cap focused investment manager, please send them my way. If you have any comments or questions, please don't hesitate to write.

Sincerely / Avi
November 2018
Brooklyn, NY

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