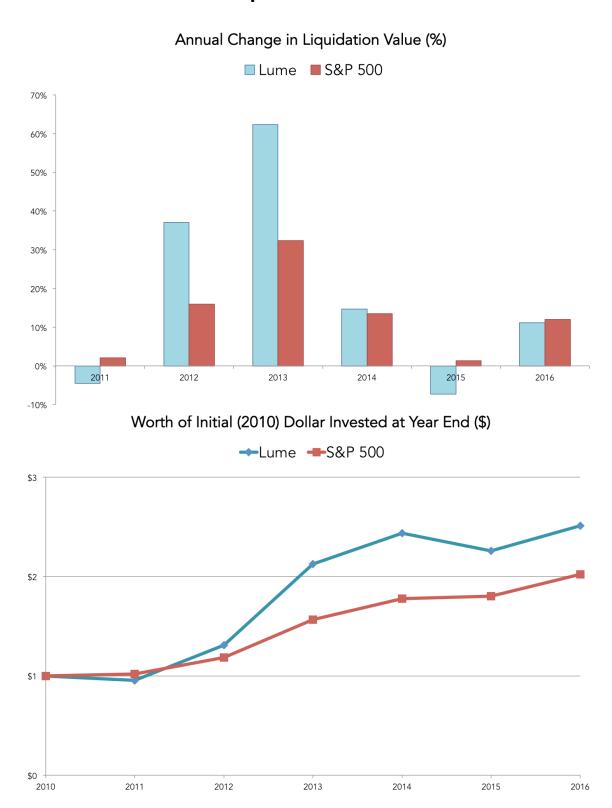


LumeGroup

2016 Annual Report

"Search others for their virtues, thyself for thy vices." - Ben Franklin

Performance Since Inception



^{*}Includes S&P Dividends, excludes taxes & fees of hypothetical S&P 500 index fund investment

October 2017 New York, NY

Lume Group's net liquidation value increased 11.1% in 2016. Since inception, Lume's net liquidation value has compounded at an annual growth rate (CAGR) of 16.6%. Our performance in 2016 lagged that of the S&P 500 at 12.0% with dividends included.

During 2016, we exited several positions which we were excited about just over one year ago. In short, we took some of our best, hard-won ideas out to the woodshed. This was necessary because, upon reassessment, it became apparent that continued investment was an unwise course—mostly due to initial errors of judgment on our part. So, even though we put our results (our "outcomes") on the front of this report, we internally evaluate ourselves not on how things turn out, but whether we make the right decisions given what is known at the time.

We worry about our decision-making rather than on our outcomes, believing that in the long run, we will earn what we deserve. So, in the spirit of the Ben Franklin quote at the helm of this report, we take note of our vices in this letter.

The following will largely consist of postmortems of some of what were once our best ideas. Though it is far more desirable to learn from another's mistakes rather than one's own, it is often the latter that renders a more lasting impact.

Postmortems

Chicago Bridge and Iron Bad Faith

Our top idea of last year proved to be a disaster, and we were lucky to walk away with a grazing, for if we had held to the time of this letter's writing, it would not be a pretty result—with losses exceeding 60%. So what happened? We believed management, for one. We believed that cost overruns of CBI's major projects would be passed onto the customer and not the contractor (CBI). We ignored the implications of the work of Bent Flyvbjerg: large projects can run into massive cost and time overruns. We ignored human nature: such "unpredictable" events are met with disputes between customer and contractor that often become protracted and ugly.

We underestimated the competition and how commoditized contracting could be, forcing CBI to underbid for projects (in a similar vein, we overestimated the size of CBI's moat and pricing power). We ignored the implications of the firm moving from cost plus contracting to fixed price contracts where there was little margin of safety. The outcome of management taking CBI and expanding from its circle of competence in storage vessels to vastly more complex projects like building nuclear power plants should have been apparent to us. We also didn't prioritize the cash flows statement, trusting management that the cash would (eventually) come. We also failed to understand the problems with a large and growing negative working capital balance, foolishly believing that this was indicative of a strength when in fact it was a ticking time bomb. We remain humbled by the often difficult task of completing big public works projects—especially when new, untested technology is to be implemented.

For some reason as all of this was coming to light, we forged on as investors, believing that the progress of its large nuclear plants would

settle large matters and dispute resolution would largely go CBI's way. Over this time, CBI became caught in further disputes with customers, governments, and partners in other projects as well.

The last straw for us was the terms of the CBI-Westinghouse deal: a deal of bad faith, showing management's true colors. It quickly became evident that CBI, in its deal with Toshiba (parent of Westinghouse), fudged Shaw's prospects (in similar way as it did to its own shareholders) and swiftly moved to offload this noxious asset. So doomed was this asset that it sunk the mighty Westinghouse. Partnering with such individuals in business is not pretty and we will avoid it wherever we can, for we've learned from Warren Buffett the value of integrity in business. We'd seen all we needed to, we destroyed one of our hardest won, best ideas, and completely liquidated (within hours) our entire stake for a loss. If only we had acted much earlier when the warning signs started building.

We were lucky with the timing of our sale as, in the months following our exit, management's house of cards came tumbling down with poor financial results, culminating in the ouster of its CEO and severe decline in CBI's stock price. Despite surreptitiously unloading Shaw (which certainly would have otherwise bankrupted CBI as it has now mortally wounded Westinghouse), CBI's remaining businesses were still not able to justify its market price—a market price we had argued was deeply undervalued just last year. That fact alone demonstrates how colossal of an error in judgement we made in buying CBI in the first place.

Gap, Inc.
A Story of Retail Armageddon

What is retail but a commodity business? A middle-man who stands between the producer and the consumer? Enter Amazon, who ships directly from its warehouses and transparently beams its prices and product reviews to screens in your pocket. Before Amazon, there was Wal-Mart, who advertised its "everyday low prices" as it wrought efficiency from the retail business to profitably destroy its competitors. Amazon has taken that process further with the advent of internet shopping, transparent pricing, and current investor tolerance for deferred profits (which may be a consequence of historically low interest rates). Retail is a brutally competitive business.

We thought that clothing brands, surely, would be protected from these changes. Strong brands like The Gap, Banana Republic, and Old Navy had spent decades building reputations and pavlovian associations among consumers. But there were other entrants in that fray too: there was H&M with its "fast fashion" concept of selling clothing of perhaps lesser quality, but right off the runway and more in tune with fashion trends. There was Uniqlo which took the H&M concept and made the experience of clothes shopping feel more in tune with the current technological age. While we may have been correct that consumers largely buy clothing on the basis of brands and still (like with groceries), hesitate to buy garments from online outlets, we did not account for a second order effect from Amazon's rise. That second order effect is the general decline of foot traffic to shopping malls and retail outletslocations where Gap, Inc had fortified itself over decades, through a series of brutal wars with its competitors, now to find that many of these once desirable locations have lost their luster.

H&M and Uniqlo, the two competitors who took retail clothing by storm in the U.S. have also changed the game. Gap's more traditional clothing and slow changing styles could not keep pace with such agile competition. Though Gap's common stock traded at favorable price to prior earnings and the company had saliva-inducing return on equity, those were all historical numbers. A protracted decline in revenue for a firm with high operating leverage (as retailers and commodity producers often possess) could prove devastating very quickly.

We sold for a loss and GPS surged shortly after our sale, plummeted after that, and is rising again at the time of writing: well above our exit (though nowhere near its glory days). And we have no idea where it's headed from here. We were surely out of our circle of competence in fashion and retail, and so this lesson was necessary.

IBM

Focused on the Outcomes

When we heard in 2011 that Warren Buffett had bought a significant stake in IBM, we were eager to learn more. Perusing IBM's historical financial statements painted a rosy picture: one of ample free cash generation, robust capital allocation, and mouth watering returns on capital. What was more was IBM's "five year plan" to raise operating EPS to \$20 per share by 2015—a remarkable proclamation (both for its ambitiousness and public nature). Well, it's now almost the end of 2017 and IBM isn't even close to that old target, with an expected 2017 operating EPS of just \$13.80. Despite selling out of our position at slight profit, we would call that an outcome worthy of a postmortem.

We were initially impressed by IBM's historical achievements (stretching over an entire century) and awed by management's long term plans, while Warren Buffett's nice words only served to reinforce in our minds the merits of our investment. We acknowledged that past returns do not imply future performance. However, IBM possessed many "sticky" relationships with its customers through the unique nature of its products, and we did not anticipate any sudden shocks in these relationships (and they have, by our assessment, largely persisted to this day).

Our experience in technology should have warned us in other regards – here was IBM, an established company in a hyper-competitive industry, whose main priority seemed to be engineering its financial results to a predefined goal. We are generally wary of "five year plans" and the like as

we have been repeatedly humbled by the unpredictability of the future. We also knew that tech companies succeed when they focus on one thing and one thing only: customer experience (Apple is an exemplar of this philosophy). IBM's senior management did not seem to focus on this area in advertisements, press releases, conferences, interviews, and talks by its executives. Rather, there was often an aloof, superficial plug of the promises of a product like Watson with little discussion of real world implementation of the technology and its benefits. The true potential of products like Watson and IBM's Cloud products were treated as foregone conclusions, though full scale rollout always seemed remote.

Management seemed more focused on getting such "strategic imperatives" to a certain percentage of total revenue without regard for the details on how the customer was to benefit from these products and desire them over competing products and services.

Such detachment from the product and overall customer experience combined with faith in their five year plan led to the outcome today. That's why we ourselves have learned from IBM's mistakes for our own investment process: we will strive to focus on making the right decisions and the outcomes will take care of themselves. IBM's management seemed to have put focus on financial outcomes, not business decisions.

No five year plan will anticipate black swans. Five year plans will not anticipate competition taking a major foothold in your industry. The only likely outcome from a five year plan will be the development of a false sense of confidence. This can be especially dangerous in technology: where change occurs rapidly.

We started buying IBM in 2012 and bought significantly more on its slow decline and when it dipped more drastically at the end of 2015 into early 2016, averaging our stake down. We eventually sold out of our stake at modest profit when IBM rose through 2016 thanks to our reduced average cost. Since then, its stock price has dropped, Watson's potential remains as remote as it was five years ago, and Buffett has publicly

admitted that IBM is facing strong competitive pressures, revaluing the shares downward. IBM dropped the ball, and we were lucky to have destroyed one of our best ideas and walked away.

Wesco Aircraft
No Idea What We're Doing

We initially invested in Wesco Aircraft after reading analysis by like minded value investors online and conducting our own research. We also were encouraged by Makaira's investment and Tom Bankroft's appointment to the board of directors. We believed that Wesco possessed a sticky business with its customers that was "toll-booth" like and its recent acquisition of Haas would only expand its business. The company was family run until recently and the Haas acquisition slowed an impressive growth rate of the firm.

Many synergies were promised by management regarding Haas, including cost savings, that failed to materialize. Furthermore, the acquisition was financed with debt that was a large multiple of cash flows. Wesco was a company we poorly understood and to this day still do not fully understand. A supplier to aerospace companies that maintains large inventory for its customers in the hope of shortages. An investment we never should have touched, outside our circle of competence. We still need to improve our understanding of inventory management and working capital (as CBI showed above), as clear warning signs were present with Wesco.

We did not understand the firm, and when the once touted synergies and improved financial results did not materialize, we sold WAIR for a slight loss. The timing happened to be very fortuitous as WAIR has declined over 40% this year from the levels of our initial purchase. Again, we came away only with a laceration because we recognized our investment was

made under flawed analysis. Unlike this experience, we hope to act more prophylactically in the future.

Review

To review the overall reasons behind our transgressions, much of our assessment will employ Charlie Munger's list of major psychological tendencies¹ to highlight the underpinnings of our bad decisions.

Many of these situations were of the "turnaround" type which attracts so many value seeking investors. The return to grace of a firm cast away is often much more complicated than thought by stakeholders, and the reliance on historical performance and its projection into the future ("anchoring") often clouds the judgement of both investors and managers. Overoptimism, doubt avoidance and inconsistency avoidance played big roles here. Lots of pain-avoiding denial was also present for a long while, especially as CBI's ills unfurled. Curiosity tendency led us straying to Gap, Inc.—far outside our circle of competence.

Wesco and IBM involved following other pro investors while trusting management's projections. This was a commitment of many cognitive errors on our part. Liking, social proof, influence from mere association, doubt and inconsistency avoidance tendencies played big roles here in affecting our judgement. In addition, our initial confidence in IBM's five year plan and hype behind its future products, demonstrates reason-respecting tendency as well as availability mis-weighing tendency.

Fortunately, while many psychological tendencies led to our mistakes, others encouraged us to exit many of our positions before suffering mortal wounds. Disliking of unscrupulous managerial tactics, super

¹ Kaufman, Peter D. (Ed.). "Poor Charlie's Almanack: The Wit and Wisdom of Charles T. Munger". Expanded 3rd Edition, © 2011.

response to the punishment of poor financial performance, reciprocation tendency, and super reaction to the deprival of what was initially promised led us to ditch many of these bad ideas.

Conclusion

After writing these postmortem reports, we feel lucky to have the results that we do above. In fact, we may have actually received more than we deserved last year. Our goal is to improve future decision making by learning from our past mistakes. We will relentlessly strive in this manner to be more deserving of a fortunate future.

Signed,

P. Dalal