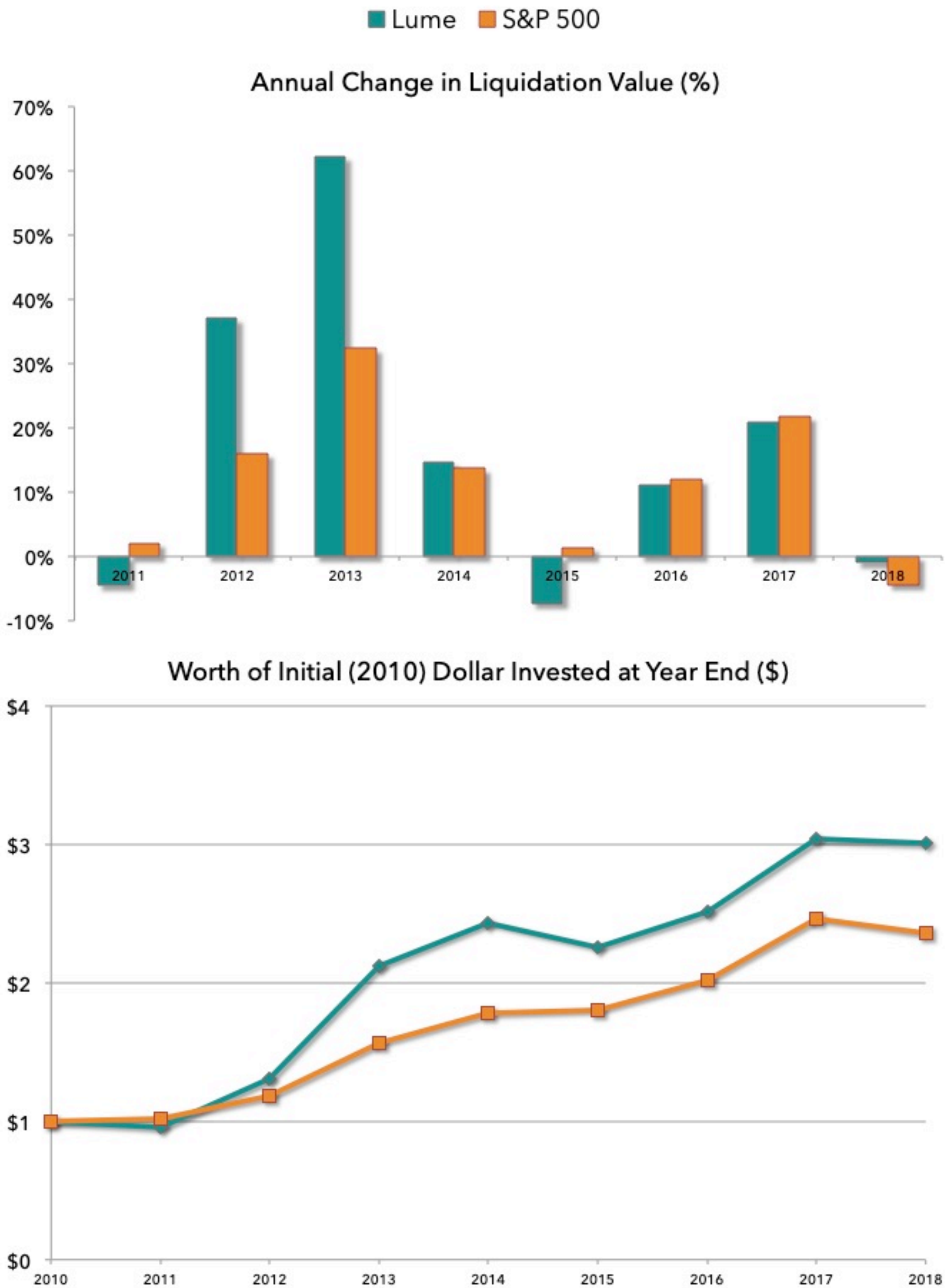
Lume Group

2018 Annual Report

“Hide not your talents, they for use were made.
What’s a sundial in the shade?”

- Ben Franklin

Sundial (?)
Khirbet Qumran, Judean Desert
1st century BCE - 1st century CE
Limestone



All figures pretax. Excludes fees of hypothetical S&P 500 index fund investment

February 24, 2019 New York, NY

Lume Group's net liquidation value declined 0.97% in 2018, compared with a decline of 4.38% for the S&P 500.

General Motors: A Poor Result I Stand By

As of writing, I have completely liquidated long positions in General Motors which largely consisted of the Series B Warrants (Strike Price $18.33, expiry July 10, 2019). I was lucky—exiting with a slight gain, but I held on for a long time, meaning my annualized returns were pitiful. What's more: I gave up chunks of dividends with my warrant-heavy allocation. An explanation as to *why GM* is warranted here.

Assessment of investment prospects must focus on not only odds, but **payoffs**—and sometimes the payoffs alone can make an investment interesting. In last year's letter I focused on odds: supposedly calculable and updatable from Bayesian analysis. When I originally invested in GM back in 2013, I was not as confident about the odds of a fortunate outcome as I was of the potential payoffs.

Buying common stock generally offers **asymmetric payoffs**: the downside is limited to 100% while the upside is theoretically limitless (beyond 100%). Obviously there are upper bounds, but mania can sometimes drive asymmetric securities to unimaginable heights. A recent example is the Bitcoin bubble whose size exceeded even that of Tulips and the South Sea Company. That latter historical example duped even that legendary mathematician often credited with inventing calculus:

> *"I can calculate the motion of heavenly bodies but not the madness of people."*
>
> – *Isaac Newton*

The thing about asymmetry is that sometimes, even if you are more likely to be wrong than right (ie. the odds are against you), you can still get a favorable investment result.

Imagine a roulette wheel only has black and red pockets (no green ones), meaning the odds of landing either color is 50:50 (or 1:1). When betting on red or black, one would expect the standard, **symmetric payoff** of doubling your bet when you are correct (100% return) and losing your entire bet (100% loss) when wrong. If this roulette wheel instead offered you a chance to not double, but triple your bet (200% return) if it landed on red, while still losing 100% if on black (an asymmetric payoff structure), you'd better make that bet over and over again. The *odds* of the ball landing on red or black have not changed (they're still 1:1)—but the *payoffs* sure have.

So, sometimes, a large payoff is all that's necessary to bet aggressively. Sometimes even, the odds are stacked against you—that is, you're more likely to be wrong than right, but if the payoffs more than compensate you for that, then it may be worth making the bet. A mathematical way of formalizing this is to calculate the **expected value** of a situation (by multiplying the probability of each outcome and its respective payoff and taking the sum of all of these).

So what does this all have to do with GM?

The odds of GM succeeding were unfavorable (even more so than I had thought) and there was plenty of evidence for that. It had gone from a corporate titan to stunning failure. Its failure occurred not swiftly, but after decades of erosion in many fundamental aspects of its business. A Warren Buffett quote on brilliant management attempting to "turn around" a fundamentally weak business (as GM was and continues to be) is prescient:

"When a management with a reputation for brilliance tackles a business with a reputation for bad economics, it is the reputation of the business that remains intact."

– Warren Buffett

Nonetheless, I presumed that maybe the odds weren't as bad as they could be. GM emerged from bankruptcy with a 2010 IPO, having disposed of significant liabilities: not just debt obligations, but a bloated brand portfolio (Pontiac, Saturn, Hummer, etc.), excess dealerships, excess headcount, and excess manufacturing capacity, to name a few. Meanwhile, in GM's core market there was a steady economic recovery where oil prices were low and SUV's were becoming more and more popular, while sedans (where GM's Japanese competitors excelled) less so: this was good for GM whose niche is in the big cars (with bigger margins). Furthermore, interest rates were at record lows and U.S. unemployment was shrinking. Many of GM's competitors had struggled during the crisis as well, but without the benefit of swiftly shedding underperforming assets and liabilities in Chapter 11. So maybe GM got to start with a clean slate in a fortuitous environment. But all of this was on the margin of my thesis: what really interested me was the payoff structure as evident in the valuation of the company.

Despite emerging leaner, GM carried a relatively depressed stock market valuation due to the stigma of bankruptcy, as well as an investing community shook by a harrowing recent economic crisis. So the market was already pricing in disappointment. If GM performed even modestly well, I forecast that the stock price would trade significantly higher as it was at a rock bottom single digit price to earnings multiple (of what I estimated were already depressed earnings). So, the payoffs seemed highly asymmetric: if GM struggled, the stock price was unlikely to go much lower; if GM cleared a low hurdle (low expectations), it was likely to trade significantly higher. And if it stayed lower, management would buy back more shares (thus increasing the value and earnings per share to remaining shareholders). Low downside, high upside (or red pays 2 chips while a losing bet only costs 1 chip). Furthermore, the purchase of warrants expiring years out amplified the asymmetry in payoffs. Needless to say, it didn't quite work out the way I thought it would.

It turns out that even after Chapter 11, the slate wasn't so clean. The days of GM's brands being American icons are long gone. The company produces largely commoditized products with little differentiation from competitors. And many of its competitors (such as Toyota) continue to have better reputations with customers (tenaciously won over decades). Its efforts in selling higher margin products has been lackluster: it has had little success in rebuilding a true luxury brand in Cadillac. And it turned out that bankruptcy didn't (and couldn't) discharge all of the bad: shortly after my initial investment, GM announced a massive recall due to an ignition switch fault from models produced in the past by "old" GM that turned out to be expensive and another hit to "new" GM's reputation.

So perhaps the payoffs remain attractive for this forever turnaround situation. The odds keep crushing it however. Despite many proclamations of culture change and executive reshuffling, the firm doesn't seem to understand certain customer segments (younger folks and luxury customers for instance). It seems fixated on chasing competitors it is losing to (BMW for example) without innovating products to leapfrog these competitors (as upstart Tesla has accomplished with a fraction of the resources). It embraces old forms of marketing (big ad agencies), often running campaigns ad nauseam. It relies on focus groups for product design. Furthermore, its baggage with dealerships and unions don't add to its competitive advantage (eg. dealerships who insist on Cadillac and Chevy sharing retail space). My only measurable return: that I've (hopefully) learned what to avoid in the future from investing in GM.

Such divergence of odds and payoffs tends to occur (and often persists) with turnaround situations of a company that has fallen from grace like GM. Hence, they lure value oriented investors and are often derided as “value traps”. It turns out that such businesses cannot so easily change the fundamental factors that drove them into trouble. GM remains a low margin, capital intensive, and cyclical business. It tried to return capital to shareholders, but (like many corporations these days) the efficacy of its buybacks (in actually reducing share count) was pathetic. Management issuance of shares for its own compensation at the same low prices it is buying them back never helps and is a sly manifestation of the **agency problem**. Another major factor underlying its inefficacy of capital returns is that GM is a capital intensive business, so its free cash generation never matched up to reported earnings (a good chunk of its cash ended up in expensive plants and facilities rather than in the hands of owners). I could have learned from Charlie Munger here:

> *“We prefer businesses that drown in cash. An example of a different business is construction equipment. You work hard all year and there is your profit sitting in the yard. We avoid businesses like that. We prefer those that can write us a check at the end of the year.”*
>
> *– Charlie Munger*

So I was wrong on GM, but perhaps the favorable payoff meant that in the end, I didn’t lose much. If I had been correct, I believe the payoff (especially in the warrants) would have been significantly larger than the downside. In this case, I was wrong and the downside was exiting at near break even. Obviously there are plenty of plausible scenarios where I would have lost money, even 100% with the warrants.

I approach investing knowing there is no way to be correct about everything. One must have a stomach for wide uncertainty in this game. And I gather that if I choose the bets with the right combination of (estimated) payoffs and odds, I’ll be fine in the long run. Furthermore, I frequently update (albeit imperfectly) my Bayesian estimate of the odds.

As the world is constantly generating information, I look out for signal (prior odds far from 1) and try to filter it from noise (there's plenty of it).

I will unabashedly continue to make "mistakes" that may echo GM. They will tend to appear as mistakes not just with hindsight, but even prospectively: value investing often consists of buying the discarded and dismissed. However, GM has changed my view of businesses like it (low margin, cyclical, and capital intensive) and downwardly revised my baseline odds for turnaround situations in general. This means that the threshold for turnarounds to elicit my interest is much higher (ie. the odds and/or payoffs have to be substantially more in my favor).

The Fall of Titan Brands: Rest in Peace

The names Cadillac and Chevrolet used to have meaning. That value has faded and can't be so easily brought back. Other formerly indomitable consumer brands—Kraft, Budweiser, Coca Cola, McDonald's and The Gap have also met turbulence. What was once loyalty that stood for decades can now rapidly crumble. Investors like Jorge Paulo Lemann have acknowledged the changes afoot for consumer brands. Loyalty alone can no longer hold up valuable franchises. Consumer tastes have changed. What used to mean something to the older generations is now meaningless to rising Millennials. And decades of mistakes and slow, misguided strategy has caused death by a thousand cuts to these firms.

Sure, Millennials may have grown up eating Kraft Mac & Cheese, but in adulthood, they have come to reject what these brands represent. Furthermore, perhaps these firms, through decades of "corporate strategy" at headquarters, corrupted what their brands once stood for (one example is the quality of McDonald's ingredients). It's easy to blame Millennials for killing a certain brand, trend, or firm, but the implications of this should not be easily dismissed: generational shifts in tastes and attitudes tend to become long-lasting and can't be easily reversed.

Other factors, beyond consumer tastes, are responsible as well. The internet has created unimaginable choice for consumers when in the past, the local grocery or department store would have only had the big brands available. Choice in media consumption, also largely due to the internet, means that big firms lose the potency of marketing via major TV networks or newspapers. Consumers win when they can more easily (and cheaply) access non-industrialized and healthier food sources along with more personalized brands. Private equity firms like 3G, which thought that loading these moated brands with debt would be an easy way to boost returns, may come to sorely regret their investments. The moats have eroded. Leverage may now only accelerate the inevitable.

Disruption is rampant. Observe the top companies of the S&P 500, some of which were not even born 20 years ago. Meanwhile, former titans General Electric and IBM have been relegated to *has-been* firms (and their financial results justify it). And where did Tesla come from? BMW and Mercedes-Benz built their reputations with luxury customers over decades. Tesla has been around for a fraction of the time and now threatens their position with practically no marketing budget.

Titan firms of the twentieth century may be meeting their ends. Despite this, many are sticking to tried and true marketing and product strategies that are extremely outdated (and losing efficacy by the day). Their brands, which were hits with baby boomers, don't resonate well with rising generations. The pavlovian associations may not have been inherited. And what's more—Millennials may be actively shunning these brands for what they represent: in many ways, flawed products and ways of doing business of the old world. It may be time to take stock and shift to the great brands of the future—not those of yesterday:

"I skate to where the puck is going to be, not where it has been."
– Wayne Gretzky

Conclusion: Failure Tolerance

I continue to try and refine my talents (sundials). Pursuit of knowledge is key to mastering the understanding of quantitative and qualitative factors underlying an investment. In 2019, I hope to bring more talents online (out of the shade). So, Lume's purpose will broaden.

Most importantly, <u>Lume Group will serve as a blank canvas for tinkering</u>: embracing experimentation, iteration, and of course, failure.

Failure: it must be seen as necessary when on the road to growth. Failures are largely hidden from outsiders due to the inherent survivorship bias of creative processes (winners make it on stage while failures accumulate in heaps behind the curtain). I aim to be proud of my failures—not only as learning opportunities, but as remnants—scars—of worthy trials.

Signed,

P. Dalal