

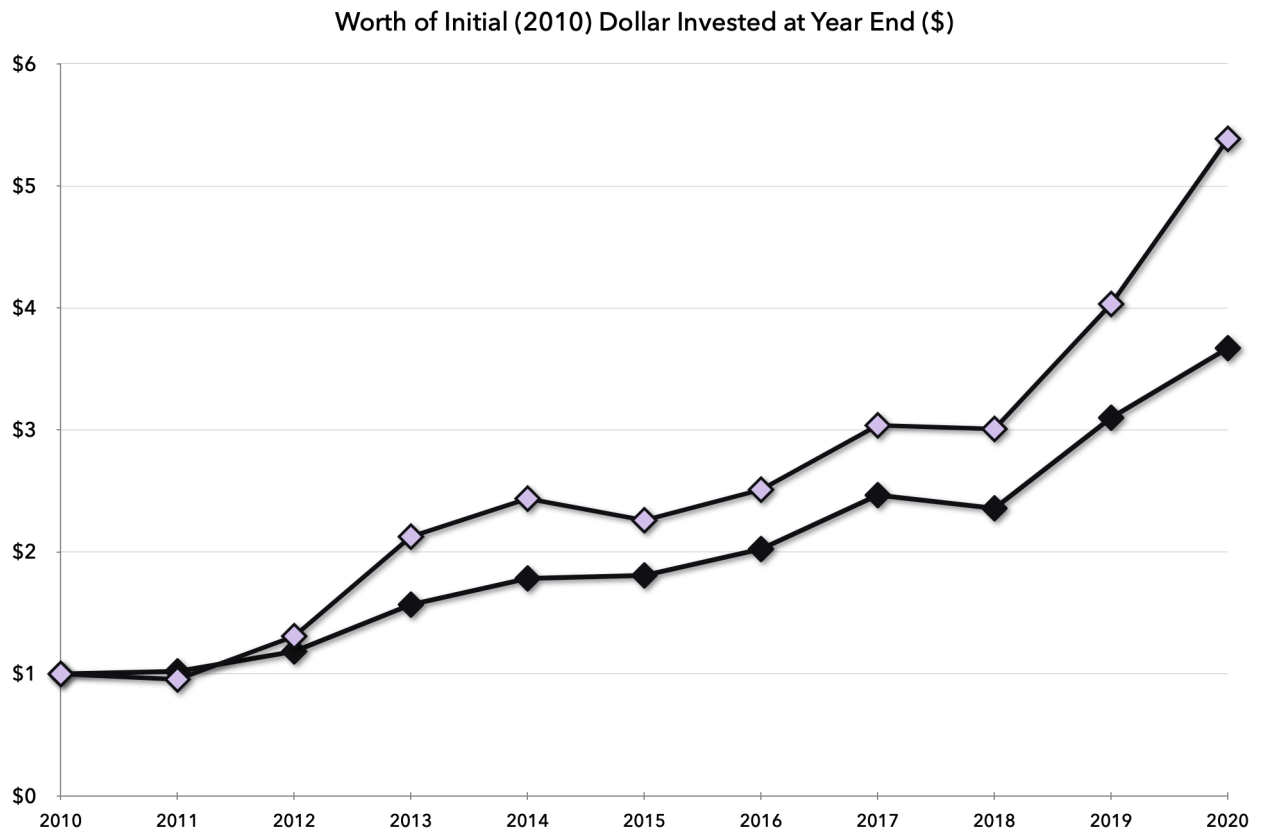
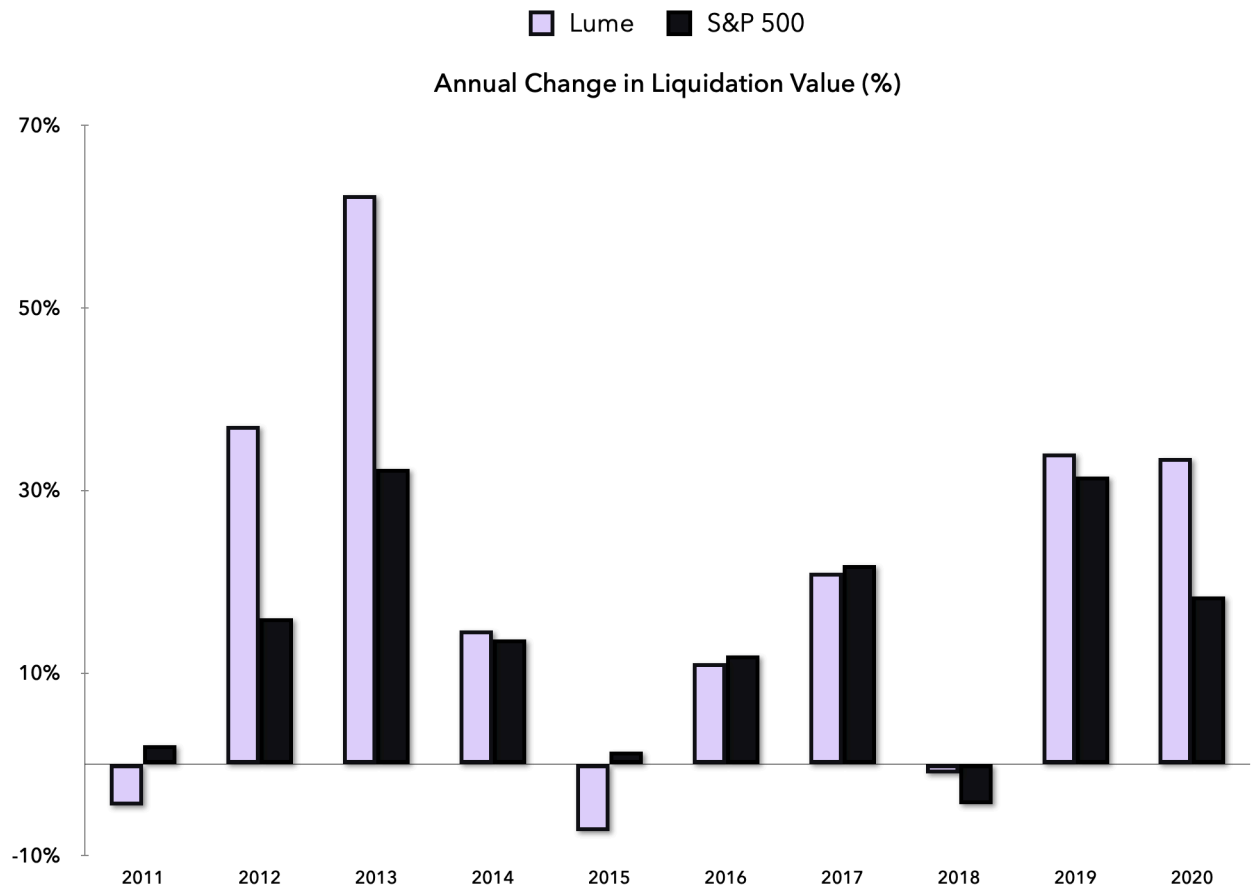


Lume Group

2020 Annual Report

*“Experience keeps a dear school, but Fools
will learn in no other.”*

– Ben Franklin



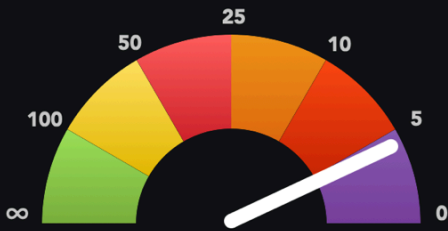
All figures pretax.

Lume Group



10 Years

Doubling Time
4.1 Years



CAGR

18.3%

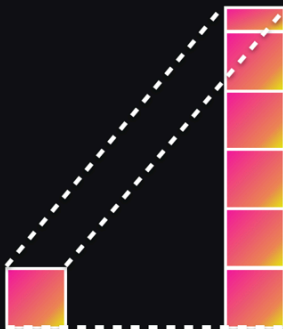
S&P: 13.9%



Multiplier

5.4x

S&P: 3.7x



Annual Returns

Year	Lume	S&P 500	Relative
2011	-4.5%	2.1%	-6.6%
2012	37.1%	16.0%	21.1%
2013	62.3%	32.4%	29.9%
2014	14.7%	13.7%	1.0%
2015	-7.3%	1.4%	-8.7%
2016	11.1%	12.0%	-0.9%
2017	21.0%	21.8%	-0.8%
2018	-1.0%	-4.4%	3.4%
2019	34.1%	31.5%	2.6%
2020	33.6%	18.4%	15.2%

All figures pretax.

January 30, 2021

New York, NY

Lume Group's net liquidation value grew 33.6% in 2020, compared with a total return of 18.4% for the S&P 500. Over ten years, Lume Group's CAGR was 18.3%, meaning that each dollar invested at the end of 2010 was worth \$5.39 at year end 2020 on a pretax basis.

Learn from Experience – of Others Rather Than Your Own

As this year's Ben Franklin quote (I can think of no better for 2020) attests, learning from one's own experience is an expensive education. It is far, far better to learn from the experience of others. Yet witness the large swaths of the population that choose to learn only the hard way.

Even respected scientists and physicians chose to make recommendations early in the Covid-19 pandemic such as, "There is no specific evidence to suggest that the wearing of masks by the mass population has any potential benefit" for spread of a pathogen known to spread via respiratory droplets. Such experts were waiting for experience ("evidence") to tell them how to respond to a novel pandemic. Clearly science is filled with intelligent individuals who do not fathom the meaning of the aphorism, "Absence of evidence is not evidence of absence".

Learning vicariously—from countries that adopted early mask wearing (not just for Covid-19, but other recent coronavirus outbreaks)—would have imparted some valuable "evidence" from which to form early recommendations. Perhaps these scientists could have learned from many who have navigated black swan crises throughout history – that one does not wait for formal "evidence" to emerge, but must act swiftly and decisively despite incomplete information. These lettered individuals

also failed to grasp the steep asymmetry in an action like mask wearing – a low cost, potential high reward action (Ben Franklin: “An ounce of prevention is worth a pound of cure”). Recognition of the value of these simple ideas would lead any reasonable philosopher to recommend widespread mask usage early on. But modern day scientists and doctors are far from philosophers. In my view, such errors in cognition are due to an overly academic way of thinking and a lack of practice in risk taking, leading to a dismissal of valuable heuristics that spare much pain in life.

Some have suggested that perhaps some of these respected individuals merely wanted to ensure masks (PPE) were reserved for healthcare workers before the population scrambled for them, as there were clear supply constraints early on. Can we assume these folks intentionally misled on masks to preserve stock? Occam’s razor unfortunately does not allow the benefit of doubt here.

Finally, a stickler will say that the statement, “There is no specific evidence to suggest that the wearing of masks by the mass population has any potential benefit” was technically true for Covid-19 at the time. While indeed there was no “specific evidence” on Covid-19 given knowledge of Covid-19 itself was just a few weeks old, to miss the impact a public health authority making such a statement would have on the behavior of a population demonstrates staggering levels of stupidity that only increases the level of disrepute in my view.

Without new evidence, one is unable to update prior probabilities, so my thinking on masks early on was to default to my priors. My basic understanding of the physics of respiratory droplets as well as established evidence of masks in general with respect to respiratory pathogens (such as tuberculosis and the flu) led me, via Occam’s razor, to default to putting the mask on early out of precaution. If you propose to me that we need more evidence before deciding what to do, then I require evidence that alters my priors, not evidence that supports my

priors which already favor mask wearing. So call me crazy, but I'll wear a mask until the benefit of wearing a mask is falsified.

More Expensive Experience Learning

Even after public health figures came around to endorse mask wearing (after inflicting critical damage to their own credibility), many individuals chose instead to learn from their own experience and take a chance with covid. Some even chose to intentionally infect themselves with the virus, choosing not to learn from the millions of others suffering the consequences of its infection worldwide. Many dismissed reports of the devastation in far off lands as an overblown "hoax" of a pathogen that was merely "like the flu". Masks and isolation were shunned in some locales with surging cases. The disease course itself – a delay of days to weeks from infection to symptom onset to severe symptoms to mortality created vast opportunity for human misjudgment (and viral spread) to take hold. Social media accelerated these dynamics. In many ways, human misjudgment proved vastly more contagious than the virus itself.

Politicization of Covid-19 allowed individuals to taint thinking towards confirmation of preexisting political biases. Some politicians took the cynical path, capitalizing on the political benefits of resisting restrictions. Meanwhile, those politicians themselves were eager to receive high grade treatments and vaccination. Other government leaders who adopted some of the most stringent restrictions failed to abide by the onerous rules they forced upon their own constituents, damaging their credibility and reinforcing opposition to those measures.

Learning vicariously from others is a superpower largely unique to humans that is often neglected. And this year: there was a lot to learn and an abundance of missed learning opportunities.

Don't Limit Your Education

Don't limit yourself to learning only from those who are living. Wisdom comes from reading voraciously—learning from the experiences of individuals throughout time in a variety of contexts. Reading non-fiction prospectively, rather than with retrospective (hindsight) bias, is an effective way to empathize with experiences in what were often unprecedented circumstances. And one will find that those seemingly unprecedented happenings often “rhyme” with many others throughout history (a notion attributed to Mark Twain). Even works of fiction can impart invaluable lessons, incorporating themes from contemporary affairs. There are centuries upon centuries of lessons. Many of them generalizable to a few rules (heuristics) that are time and life saving.

What's more, by inverting while reading – finding the places where others have “died” and forming rules to avoid those places – one forges a future path that steers away from peril. For while there are many paths in history to learn from, each of us only has but one path and mistakes on that path can be very expensive and even irreversible. This is the path dependence (in the physics sense) of each individual's existence.

“And This, Too, Shall Pass”

Nearly four decades of dropping interest rates and surging equity prices have formed the current investment backdrop. Due to the prolonged duration of these tailwinds, investors have grown accustomed to them. It is foolish to presume that they will continue indefinitely.

In Anthony Bianco's *The Reichmanns*, a tale of major property developer Olympia & York, one witnesses a fortune built with sails that caught as their tailwinds the high inflation era that culminated in the early 1980s. Paul Reichmann implicitly and explicitly acted with presumption of an inevitability of persistent, elevated inflation over time derived from

personal experience as well as family lore dating back to pre-war Europe. That presumption would one day meet the likes of Paul Volcker, leading to disastrous consequences for Olympia & York.

Due to the bidding up of asset prices in the current environment, my bar for equity investment is the highest it has ever been. I seek firms with the ability to earn elevated returns on capital that sell at a fair price without excessive leverage. Wide moats are required.

As the Reichmanns have shown, one can do well as an organism that thrives in a particular environment that suits it; however, to avoid eventual peril, you must always be ready for the season to change, even if that season has gone on for decades long. Becoming accustomed to favorable environments can breed unrestrained confidence and risk taking (growing fragility) which eventually proves disastrous. Avoidance of excess leverage and embracing liquidity—holding cash—are key to navigate storms and sea-change that are bound to come.

It is true that if you buy equities today, they generally pay well relative to prevailing interest rates. However, as noted in Warren Buffett's 1977 piece, *How Inflation Swindles the Equity Investor*, stocks can be viewed as perpetual duration bonds (with "a maturity date of infinity"). If you buy a long duration bond (let alone an infinity duration one), you are highly vulnerable to a rise in interest rates. As a result, if interest rates rise, today's market values of equities will be decimated. And from where we are today, there seems to be no viable long term alternative but up for rates.

To demonstrate this, assume a business with a long duration return on equity of 12% trades at 4 times book and pays it all out, that is a 3% earnings yield for today's purchaser of its stock. This might be an acceptable return at current interest rates. However, if government bond rates rise to 6%, that stock must fall significantly (more than 50%) to compensate for its equity risk premium. The higher equity prices start

from, the further they will have to fall. There is a growing probability of a long duration of below average equity returns. This means steeply negative returns for certain individual issues. Our goal is to navigate such a torrid environment and come out stronger on the other end.

How can we achieve this? The answer is to shun overpriced investments that are in fashion and to espouse ample liquidity.

Batten Down the Hatches: Cash is Like Oxygen (and Anti-Fragile)

"...some day in the next 100 years when the world stops again, we will be ready. There will be some incident, it could be tomorrow. At that time, you need cash. Cash at that time is like oxygen:

When you don't need it, you don't notice it.

When you do need it, it's the only thing you need."

– Warren Buffett

When time brings surprises, one must be positioned to seize optionality. Greek philosopher Thales made a fortune hoarding olive presses over two thousand years ago, as highlighted in Nassim Taleb's *Antifragile*. Thales, in seeking to leverage asymmetry and optionality, leased olive presses at low rates. When a bountiful olive harvest came, Thales sold off his rights to the highly in-demand presses, earning a fortune.

Now we come to a modern story that rhymes with Thales' of 600 BC: that of Warren Buffett. In the climax of the financial crisis of 2008, cash, rather than the olive press, came in high demand. Despite the difference of instrument, the lessons are the same.

Storied institutions, deeply embedded in the financial system failed, triggering a liquidity crisis that spread widely (contagion) due to counterparty risk. With capital markets drying up, firms that did not keep a stock of spare olive presses (cash) were brought to the brink of insolvency. General Electric and Goldman Sachs, long-held as exemplars of their industries, scrambled for cash (“oxygen”) for survival.

In telling of Thales’ story, Taleb disputes Aristotle’s view that Thales predicted a bountiful olive harvest based on astronomy guided climate forecasts, but instead appreciated the existing asymmetry and positioned accordingly by purchasing a cheap option. Per Taleb, Thales had no real knowledge of where olive production would go and when a large payoff would occur, but understood that the possibility of such a scenario existed and occurred from time to time.

Similarly, Buffett acknowledges he too cannot read the stars (predict when the next crisis and scramble for cash will occur), which is why he always holds excess cash:

“BRK [Berkshire Hathaway] always has \$20 billion or more in cash. It sounds crazy, never need anything like it, but some day in the next 100 years when the world stops again, we will be ready...We operate from a level of liquidity that no one else does. We don’t want to operate on bank lines...Something like that will happen maybe a couple of times in your lifetime. Two things when it happens again – don’t let it ruin you, and if you have money/guts, you’ll have an opportunity to buy things at prices that don’t make sense.”

– Warren Buffett

Few corporate managers and portfolio managers would ever view holding excess cash as strategic. Rather, such a move is denigrated as “waste” that (in the short term) brings down return on capital metrics and

their own compensation as well. These people instead “optimize the balance sheet” by leveraging to a predetermined “optimal” multiple of EBITDA deemed appropriate for their industry (promulgated by analysts, private equity outfits, and bankers). They are setting themselves for high returns in the short run, and certain disaster in the long run. Such highly educated individuals still have a lot to learn, and could start their continuing education with a Franklin one liner:

“When the Well’s dry, we know the Worth of Water.”

— Ben Franklin

In the end, Buffett extracted handsome rewards when he turned around and offered his liquidity (call it what you will: olive presses, oxygen, or water) to corporate executives and bankers when they desperately needed it. In return for his cash, he extracted preferred stock and other lucrative arrangements from what were at the time destinations of top business school graduates: Goldman Sachs and General Electric. Eventually, Bank of America too came knocking at Buffett’s door.

So, Buffett ended up showing that holding excess cash is the right thing to do over the long run: it provides vast advantages if it is deployed in the depths of crises which are certain to occur from time to time (but no one knows when). And it allows one to avoid ruin (the uncle point), as many have learned the hard way – through their own experience (having failed to learn it from others).

A crisis like the one in 2008 occurred in March of 2020, but markets rebounded faster than I guessed. I did belatedly seize certain opportunities and earned sizable returns to close out the year, however this was despite the large expense (opportunity cost) of holding a significant bundle of cash throughout the year. This pile of cash served as a drag on my returns, but provided downside protection. And I wouldn’t do it any other way if I had to again.

Conclusion

History serves as a fundamentally imperfect guide. As attributed to Mark Twain, "History doesn't repeat itself, but often rhymes". I can learn some from the rhyme, even if I can't predict the line.

As the ten year review of my performance reveals, I happened to thrive in the current season of low rates and rising equity prices. But I have to be ready for the season to change. And the question of when the season will change is unknowable. My fundamental mission is to minimize the doubling time of investable assets while avoiding ruin over the long haul. It's far easier said than done, but I aim do so with the experience and wisdom of those who came before me as my guide.

Signed,

P. Dalal