2018 ANNUAL LETTER

For calendar year 2018, the Ballast Portfolio returned (0.30%) before fees and (1.3%) net of fees, compared to (10%) for the Russell 2500 and (12.4%) for the Russell 2500 Value. For fourth quarter 2018, the Ballast Portfolio returned (14.7%) before fees and (14.9%) net of fees, compared to (18.5%) for the Russell 2500 and (17.1%) for the Russell 2500 Value.

		Periodic Returns				Annualized Returns	
		2015*	2016	2017	2018	1 Year	3 Years
Ballast Portfolio[a]	Gross	-7.6%	23.7%	13.5%	-0.3%	-0.3%	11.9%
	Net	-8.0%	22.9%	12.7%	-1.3%	-1.3%	10.8%
Russell 2500[b]		-6.9%	17.6%	16.8%	-10.0%	-10.0%	7.3%
Russell 2500 Value[c]		-5.8%	25.2%	10.3%	-12.4%	-12.4%	6.6%

Performance (as of 12.31.2018) *2015 performance from 8.11.2015 through 12.31.2015

As absolute return investors, we are disappointed the portfolio declined in 4Q18. However, we are pleased to see that our "downside first" approach produced results that compare very favorably with our benchmarks and equities in general (aggregate US market capitalization fell 14% in the fourth quarter and 6% in full year 2018). We are also pleased with the results our process produced over the last three years, which included two years of good equity returns and one year of equity losses. The low downside capture (65%) with full upside participation (111%) is exactly what we expect our process to produce. Although just a side effect, we are extremely happy to report that BAM's inaugural independent one- and three-year returns are above the 5th percentile in our peer universe[1].

"Boy, that escalated quickly" – Ron Burgundy, Anchorman

So there we were last summer, trotting along without a care in the world. The economy was great, the market was rocking, and the Texas Longhorns appeared to have finally found a good football team. Then,

[1] eVestment's SMid Cap Core universe

September came around, and the world seemed to change. What happened? Let's take this step-by-step. Apologies in advance for getting a little deep in the weeds here.

At the start of 2018, we thought the mosaic of economic and financial evidence indicated the real economy would perform well but that financial markets would be more volatile. Relative to our expectations, global growth was slower (trade friction, China addressing internal structural issues, Brexit, Turkey, and Argentina among other things). In the US, tax stimulus powered stronger growth, which matters more to the companies in our portfolio. With respect to financial markets, returns were lousy and volatility rose across markets. According to Deutsche Bank, 90% of asset classes had negative returns in 2018 – not since the 1930s have more than 70% of asset classes fallen in a single year and even *then* it was fewer than 80%.

The disconnect between markets and the real economy seems to continue, with equity multiples acting as if a recession were a sure thing, rather than just the bond market's implied 50% probability of recession within 12 months (according to the NYFRB's term premium model). In fact, most economic data continues to indicate moderate growth. For instance, the latest ISM Purchasing Manager's Index for manufacturing was off its red-hot 58-60 readings earlier in the year, but still stood at 54 versus the normal interpretation of anything over 50-51 indicating economic expansion. Although the housing market cooled over all this year, the latest reading showed new home sales increased about 6% year to date through third quarter (take that, mortgage rates!)[2]. Auto sales also held up in 2018, at 17.2 million versus 17.1 million last year. So why, despite forward earnings growing 20%, did the Russell 2500 fall 25% from its mid-year peak to finish 2018 down 11.3%? Why did high yield debt and leveraged loan issuance taper off dramatically in the fourth quarter? Why, with real GDP up about 2.5% to 3% and 3.9% unemployment, are 10-year treasuries yielding 2.8% when 3% to 4% would be more historically consistent?

The answer, beyond everything is obvious in hindsight, is that in 2018 we saw the trees and missed the forest – quantitative tightening (QT). There are other factors that can explain the unusual configuration of data points individually, but we suspect the common cause is tightening credit. For instance, The Fed Funds Rate (FFR) simply is not high enough relative to inflation and profit margins to stall growth on its own. We think QT amplifies the impact of higher fed funds rates and that this explains the disconnect between markets and the real economy. The Council on Foreign Relations published an analysis indicating QT through October 2018 was equivalent to 70bp of FFR hikes and that the $50b/month QT run rate at the end of 2018 was equivalent to 220bp of tightening. In other words, it is as if the FFR jumped from 3.25% to 4.7% in November 2018. Although CFR's high-end estimate seems too aggressive, even the lower one is higher than the 3% the Fed has signaled as neutral to growth. We explain QT further below, but first the practical implications for 2019:

[2] It's not just mortgage rates hitting home sales. Household formation indicates demand for homes exists, but new home supply is heavily skewed to larger, higher-priced homes, which builders prefer due to the higher per home profit. Over the last 20 years, adjusted for inflation, the mix of new homes sold for less than $300k has fallen from about 80% to less than 30%. First-time homebuyers consistently report affordability as the number one reason they still rent.

1. **volatility remains elevated** – financial strategies involving leverage require liquidity and are more sensitive to small changes in interest rates

2. **lower equity multiples and asset valuations in general** – quantitative easing (QE) led to asset price inflation, QT may lead to asset price deflation

3. **slower economic growth** –

    a. private sector credit growth has been quite reasonable this cycle with very little of the unsustainable borrowing that ultimately leads to a financial recession

    b. with QT taking liquidity, credit will be marginally tighter potentially slowing the real economy, but not to stall speed

    c. global developments, for instance slowing growth in China, are a greater threat

QT is essentially the opposite of QE, so we start there. Under QE, the Fed added $3.6 trillion of cash to the economy over 2008-2014, first to relieve a liquidity crisis and then to ease credit conditions and push long-term rates down. The Fed wanted lower rates and easier credit because, as our mentor Gary Gordon explains in his book *Debt Cycle Investing*, debt growth drives GDP growth. Mechanically, under QE, the Fed bought bonds which put cash into circulation in the private sector that would have otherwise sat still in bonds. Since the Fed simply "imagined" the cash into being, as some book accounting offset to the bonds it purchased, monetarist critics expected QE's "irresponsible money printing" to lead to inflation. In actuality, the general price level has inflated 100-150bp *slower* than historical rates. That $3.6 trillion cash (and all the cash already in circulation) cycled through the economy at a slower and slower pace – but it had to go somewhere, and that somewhere was financial assets. From 2008 to 2017, the 10-year Treasury yield fell from 4% to 2.2%, Baa corporate bond yields fell from 7.2% to 4.7%, and the cyclically adjusted earnings yield on stocks fell from 4.5% to 3.1%.

From 2014 to 2017, QE/QT was in neutral. As the bonds it bought from 2008-2014 matured, the Fed reinvested the principal, keeping the amount of cash in circulation constant (all else equal). Starting at $10b/month in October 2017, a portion of maturing bonds were not reinvested, effectively causing $10b of cash to leave the economy. That's a pittance relative to US economy. But as the program ramped to the run rate of $50b/month in November and December 2018, it started to add up, to about $350 billion for the full year, about 1.8% of GDP. At the current run rate, $600 billion (3% of GDP) will come out of circulation in 2019.

Money has started cycling through the economy faster, which could partially offset the tighter liquidity. Indeed, the most recent October 2018, Senior Loan Officer Survey indicated that credit was slightly more available than at the start of the year. However, riskier parts of the corporate credit market are reflecting tighter credit conditions. For instance, 4Q18 high-yield bond issuance was only 10% of the first three quarters of 2018, and new-money leveraged loan issuance grew just 3.8% in 4Q18 versus 13.7% for the full year. If QE's excess liquidity went into financial assets, why wouldn't QT's draining liquidity come out of them?

The Fed has communicated an intent to reduce its bond holdings by $1-1.5 trillion at the $50 billion/month run-rate. That's about 4% of total US market capitalization and just about a year's worth of new borrowing by the treasury, which doesn't seem like a tremendous hurdle, but the financial system is leveraged and there is feedback. The $350 billion of tightening in 2018 coincided with a 6% decline in total stock market capitalization. Smaller companies were hit harder than larger ones – the forward P/E multiple for the S&P 500 declined 23% to 15x while the Russell 2500 compressed nearly 30% to 17x from 24x. As QT continues to run, further multiple compression seems likely, although going forward we would expect relatively less multiple compression for small and mid-cap stocks than for large cap. Assuming another $1-1.5 trillion of QT, the Russell 2500's PE could potentially compress another 10% to 15%, to 13x-14x.

All that said, markets and the economy are extremely difficult to predict, and this is more of a thought experiment, a tangential backdrop. We pick stocks and build the portfolio via bottom-up investment analysis. To the extent this scenario plays out, we think our fundamental, valuation-oriented, downside-first process will produce acceptable results and allow us to acquire great businesses at opportunistic valuations. To the extent QT is less of a drag, we would expect the portfolio to fully participate on the upside.

New Positions Initiated

LogMeIn (LOGM)

LogMeIn sells monthly and annual software subscriptions for a portfolio of collaboration, IT administration, and customer support products, including the GoTo family of software acquired from Citrix in 2017. With about $1.2bn in revenue at 85% cash gross margin, they generate adjusted EBITDA margins around 37% which converts at a high rate to free cash flow (FCF), due to tax shielding and low cap-ex requirements. While the majority of the revenue comes from mature, cash generative businesses with low single-digit growth, about 25% of revenue is growing double digits, including LastPass, Jive, and Bold360 ai (a chatbot service with new wins at Accenture, Compucom, and GE).

Prior to our initiation, in the 2Q18 earnings announcement, management unexpectedly cut revenue and EBITDA guidance for the balance of the year due to the onset of higher churn in the collaboration business. They pointed to specific factors within their control, effectively a hiccup in the integration plan, and maintained they had plans to quickly right the ship. But the market didn't buy it; the stock fell 25%, losing $1.5bn in value on an annualized 4.5% one-time hit to revenue and EBITDA, which roughly equates to about $50mm and $18mm, respectively. This overreaction created an attractive entry for a high-margin, growing, recurring revenue business trading at a 9% FCF yield.

In the 3Q results, revenue and EPS positively surprised by 3% and 5%, respectively. More importantly, churn in the collaboration business, which rose by 350bps in the previous quarter, improved by 550bps sequentially. While 3Q results offered evidence, the measures taken were working, the stock did not overreact to the upside. We took the opportunity to more than double our position. By waiting, we were able to gain key insight that the improvements were taking hold without paying substantially higher prices for that information.

Alexander & Baldwin (ALEX)

In November, we initiated a position in Alexander & Baldwin, a new REIT with history as one of Hawaii's largest private landowners dating back to the 1800s. Over the last 10 years, the asset-rich but underearning company spun off and/or divested unrelated businesses to focus on Hawaiian commercial real estate. It's conversion to a REIT in 2017 further complicated the financial statements of a somewhat complicated company with significant hidden value. It is a bit tricky to value the historical land holdings that do not produce income and are carried on the books at $150/acre, hence the hidden value. Using local comps for agricultural and urban entitled land we estimated $700 million to $1 billion of hidden value, which at the low end meant its Commercial Real Estate (CRE) and construction materials businesses had a combined value of $900 million. Even assuming cap rates shift up 100bp from current, fairly expensive valuations to neutral, the CRE business alone is worth about $1.4 billion.

Equally important, management intends to continue to streamline the company by accelerating monetization of non-CRE assets. We were prepared to be patient on the land and were pleasantly surprised when in December, ALEX announced a deal that effectively divested all its agricultural land in a tax-deferred 1031 exchange that will fund $262 million of Hawaii CRE acquisitions in the first half of 2019. The transaction unlocks the most illiquid assets and valued the land at about $8,000/acre on an effective after-tax basis versus our base case of $4,000/acre and upside of $6,300/acre. About 10% of its remaining 11,000 acres is either entitled for development or in process. The remainder has value beyond its agricultural zoning and ALEX's long local presence is an advantage for moving land through the Byzantine decade-long approval processes for development. As of 2018, we estimate those 11,000 acres are worth between $570 million and $750 million. About 65% of the value is related to the 10% of acres that are entitled or being entitled for development. Realizing the remaining land value is likely a matter of decades, but value of the 10,000 unentitled acres is likely to appreciate faster than inflation if ALEX moves it through the entitling process before monetizing.

The CRE portfolio is about 60% retail, 20% industrial, 5% office and 15% ground leases. It has numerous operating levers to increase rents and cash flow, which we've cautiously modeled as 3% annual NOI growth. Hawaii is an attractive market, with above average incomes, politically constrained land supply, and limited pressure on retailers from Amazon, due to transportation time and cost. Although ALEX may yield less than other REITs now, we expect asset monetization, reinvestment and asset repositioning to drive faster dividend growth than mainland REITs with similar portfolios.

Luminex (LMNX)

Luminex is a biological testing company with about 80% of its business in recurring or consumables revenue. The legacy business, called Licensed Technology Group, monetizes their proprietary bead-based immunoassay technology to 70+ partners including life science names like ThermoFisher and Bio-Rad. These partners leverage Luminex's open architecture to create their own FDA approved tests, resulting in a great deal of interdependence and a wide moat around the high-margin license revenue, which we expect to grow in the low single digits range. The newer business and growth opportunity, Molecular Diagnostics, caters to microbiology labs. These labs perform more routine tests (flu, strep, Bordetella, etc.) but increasingly offer some of the more advanced capabilities of bead-based technologies (respiratory viral

panel, gastro viral panel, and others). While prices for assays are relatively higher than outsourced lab work, Luminex's tabletop equipment can save labs turnaround time by being "near point of care." By improving response time, the hospital or provider can reduce the risk of an infection outbreak or improve decision time for patient care.

We reviewed Luminex earlier in the year and were favorable toward the business, but stopped short of initiating because 1) the stock ran up, reaching above $34 in July, and 2) we thought the pending loss of high-margin (though nonstrategic) LabCorp business could cause the stock to mark-down on lower top-line growth. That's exactly what we saw as 3Q18 revenue comped negatively (-2%) and the stock sold off 15% to around $25. LabCorp aside, it was a good quarter with the MDx (molecular diagnostics) businesses growing 6% and the legacy LTG consumables and royalties growing 9% and 10%, respectively, so we initiated our position.

Zayo (ZAYO)

Zayo owns an expansive network of fiber assets, including dense metro fiber, and is one of the largest remaining providers of dark fiber. Dark fiber, which simply refers to fiber optic capacity without optronics equipment, has become increasingly scarce as service providers consolidate these networks for their own use (as seen with CenturyLink's acquisition of Level 3). Dark fiber is sought by enterprises with the institutional scale to manage their own networks to meet demand for fast and secure data traffic.

Under the leadership of the CEO and founder, Zayo has been extremely acquisitive over the last decade, deploying over $6.5bn into fiber acquisitions and several billion more in fiber cap-ex. However, results have been lackluster. Operating metrics including bookings and net installations have consistently lagged expectations, dampening organic growth rates. In November, along with sub-par operating results, management announced plans to separate into two companies in an effort to "reduce the overall complexity" resulting from the inorganic growth over the last decade, and the stock capitulated, falling more than 25%.

We discerned that the business was worth substantially more and initiated a position. For starters, fiber assets have an unusually long useful life. While the operating results were disappointing, the long-term value of the assets is tremendous; and with no solvency concern, a 25% sell-off in these types of assets doesn't make sense. Based on a replacement cost analysis, we calculated that the cost for a mile of fiber ranges from $74-134k, excluding permitting costs. Zayo owns 130,000 miles of fiber, a significant portion of which is in metro areas where permitting costs tend to be elevated. For comparison, Zayo's EV-to-route-mile valuation was at $85k. Further, as one of the largest fiber networks in the world, the value of the assets to a strategic buyer would warrant a premium to replacement cost.

From a cash flow perspective, the business is underearning. While nominal free cash flow yield is only 1%, cap-ex has averaged 36% of sales. Some of the cap-ex goes to network maintenance (we estimate about 1/3), but the majority has been deployed into new fiber projects and network capacity. By easing the throttle for growth, free cash flow yield to equity could quickly jump to double digits, especially in the hands of a strategic buyer.

Finally, Zayo has been pursing REIT-conversion for its fiber assets. While the extent of this conversion depends on direct ruling by the IRS, this has the potential to produce a significant rerating for a large portion of the asset value.

Solaris Oilfield Infrastructure (SOI)

Solaris provides products, services and infrastructure solutions to the oil and gas industry. Specifically, the company rents mobile sand silos used to store, blend and discharge frac sand at drilling locations. Their product is unique to the industry because it is modular, mobile, sets up quickly, and is an enclosed system. Solaris products solve several problems for E&Ps and frac crews. First, it allows for significant storage of sand on-site, and disaggregates delivery of frac sand from the actual fracing process, which eliminates a logistical headache. Second, the system is "closed," which dramatically reduces the silica dust in the air – a significant safety issue for the industry. Third, the system reduces the number of people needed to monitor and facilitate delivery of sand during the fracing process, which reduces costs. Also, Solaris is renting the equipment rather than selling it, which reduces the overhead for fracing companies. Finally, because the storage silos are vertical and modular, they reduce the amount of real estate needed on the drilling pad.

The company also provides software that enables E&Ps to have a complete view of their sand inventory throughout the entire supply-chain – from mine to drilling pad site. This software not only adds value to the package, but it creates a barrier to switching because many of its customers will integrate Solaris software into their own ERP solutions.

We purchased the stock in November/December as the oilfield service/equipment space was getting decimated. Based on our downside analysis, we figured under the worst-case scenario there was only 25% or so downside risk. The company has negligible debt, with long-lived assets, substantial cash flow with minimal maintenance cap-ex requirements. Further, Solaris' product essentially represents new technology in the industry, and thus continues to take share from older methods of sand delivery/storage, so we believe a case can be made that they will actually grow during a downturn. Under our base case, we believe the stock is worth at least 2x the current price. If they are able to successfully build out a chemicals business as well (similar storage solutions, but for on-site drilling chemicals), our analysis suggests this is a three-bagger.

Exited Positions

We exited Natural Gas Services (NGS) in favor of Solaris Oilfield Infrastructure (SOI), where we saw similar exposure to oil and gas commodity prices but more favorable reward-to-risk and company-specific divers.

We sold our remaining shares in **XO Group (XOXO)** and **Arris (ARRS)**, both of which were acquired during the quarter.

2018 Top and Bottom Performance Contributors

Top Performing Positions			Bottom Performing Positions		
	Name	Total Return		Name	Total Return
XOXO	XO Group Inc	74%	**COHR**	Coherent Inc	-40%
CRMT	America's Car-Mart Inc/TX	62%	**HBI**	Hanesbrands Inc	-38%
IAC	IAC/InterActiveCorp	50%	**OSK**	Oshkosh Corp	-32%
XL	XL Group Ltd	60%	**ROAN**	Roan Resources Inc	-55%
NTAP	NetApp Inc	10%	**EXP**	Eagle Materials Inc	-37%

Top 5 Contributors

XO Group (XOXO) is home to the #1 brand in weddings, The Knot. Over the last 12 months, the company achieved notable success in transforming its web and registry businesses into a full-service virtual wedding planner, enhancing The Knot's intermediary role in pairing couples with wedding vendors across the industry. In the first half of 2018, EBITDA margins expanded more than 600bps, transactions revenue grew 16%, and local advertising grew 18%, all of which show that the investments made over several preceding years were gaining traction. In September, the company announced that it would be acquired by WeddingWire, Inc. in a private cash transaction for $35 per share, a 25% premium to its recent price. While many acquisitions are great for shareholders, we were disappointed to see this company go private and thought it had significantly more upside as a stand-alone company.

America's Car-Mart (CMRT) is a long-term compounder that earns excellent cash-on-cash returns and 18%-22% returns on equity. In an industry generally perceived as exploitive, Car-Mart has grown to be the largest buy-here pay-here dealer by putting customer success first, through basic financial counseling and reviewing budgets with customers, keeping vehicle prices low, and charging 16.5% interest versus typical deep subprime rates of 18%-22%. As new competitors that entered mid-decade with aggressive, economically unsustainable lending practices began to rationalize over the course of 2018, Car-Mart's disciplined underwriting flowed into margins, market share and same-store sales resumed growing, and modest new store growth resumed. We continue to see favorable reward-to-risk as credit rationalization flows into future margins, capital returns improve further, locations expand by about 5% a year, most cash flow goes to buybacks, and price-to-book recovering as the strength of Car-Mart's competitive advantage becomes self-evident.

After rising nearly 90% in 2017, **InterActive Corp (IAC)** had another outstanding year, with a total return of 50% in 2018. During the year, IAC's two largest investments, newly created ANGI HomeServices (ANGI)

and Match Group (MTCH) compiled total returns of 75% and 32%, respectively. As written about in our 3Q letter, InterActive Corp trades at a 20% discount to its intrinsic value, has a solid balance sheet, possesses an attractive portfolio of cash-generative businesses, and has a management team with proven ability to extract value from internet media companies.

XL Group (XL) is a P&C insurer first initiated in 4Q 2016. At a 0.8x book value, the stock traded at a significant discount relative to its own history and peers, and our analysis suggested limited downside under draconian scenarios. Prior to our purchase, XL had undertaken a transformative deal by acquiring Catlin from Lloyd's of London, creating an opportunity to improve ROE and extract $500mm in cost synergies in the coming quarters. During 2017, EPS beat estimates by an average of 7%, pricing improved, and the company's discount to book value narrowed. In February of 2018, France-based insurer AXA SA announced acquisition of XL Group for more than $15bn, a 37% premium to its recent price.

After returning 60% in 2017, **NetApp (NTAP)** was top performer again for 2018. NetApp supplies enterprise-class storage solutions. Once thought to be an outdated business, NetApp has successfully retooled its portfolio for the Cloud Age. As a result of scaling and tuning their salesforce, the company demonstrated steady solid top- and bottom-line surprises throughout the year.

Bottom 5 Detractors

We initiated a position in **Coherent (COHR)** in May. Coherent is a laser equipment manufacturer whose products are used in applications ranging from microelectronics manufacturing to diagnostics in healthcare. About half of the company's revenue comes from higher-margin microelectronics, which is well positioned to benefit from the shift to next-generation screen technology. As manufacturing capacity for OLED and MicroLED technology ramps, Coherent will have a leading position in the specialized annealing lasers required for production. While we recognized and accounted for the weakness in handsets, most notably the underwhelming iPhone launch late in 2017, we did not anticipate the economic weakness in Chinese markets and its near-term effect on the stock. We continue to think the long-term prospects for the business are great, and the recurring consumables revenue offers downside support in a slower economic environment.

Hanesbrands (HBI) is best known for its portfolio of consumer brands, including Hanes, Champion and Playtex, but is less known for its expansive manufacturing and distribution footprint. In 2016, the company made several acquisitions, including Champion Europe and Pacific Brands. During their investor day in May, management highlighted plans to generate $1B in operating cash flow by 2020. But a few months later, the stock took a hit with disappointing 2Q results and news that Target will discontinue its partnership with Champion C9 activewear brand in 2020. This announcement, along with lackluster execution, has created an overhang for the stock. While the Target news is disappointing, we expect the high levels of cash flow will support the stock and be used to pay down debt, accreting value to shareholders.

After two years of top contributing performance, **Oshkosh (OSK)** had a challenging year, giving back a portion of its prior gains. Fortunately, we reduced our position in 2Q 2016 and again in 4Q 2017 as the valuation began to reflect their opportunities in construction, municipal, and defense equipment markets. In 2018, however, the stock came under significant pressure, as expectations for equipment purchases were

tempered. Forward EV/EBITDA fell precipitously from more than 10x at the end of 2017 to below 6x at the close of the year. While beating top- and bottom-line expectations throughout the year, the stock was down 32% due entirely to multiple compression.

Roan Resources (ROAN), formerly part of Linn Energy, produces oil and gas from contiguous acreage primarily in the Merge and SCOOP plays, where they generate above average returns but trade at a discount to peers. It has been a year of significant transition: They took on a new name, spun off Riviera Resources, changed management, and up-listed to the NYSE. Amid this transition, crude fell from above $70 to below $50, sending the shares down more than 50% in the 4th quarter. While a 50% drop is horrible and highly unusual for us given our focus on downside, we believe all the corporate actions have muddied the waters and in the short term overwhelmed the fundamental story. Roan is dramatically underlevered with fast-growing production, has attractive acreage in a low-cost producing region, and is displaying a nice ability to continuously improve its operations.

We initiated a position in **Eagle Materials (EXP)** during the first quarter of 2018, which gave us a total return of -37% in 2018. It is an example of a properly researched and considered decision that went against us for reasons we identified, but that were unpredictable uncertainties: (1) slower homebuilding, and (2) multiple compression as the market discounted potential recession. The risk of slower homebuilding is accounted for in our downside target and multiple compression is incorporated to both our upside and downside price targets. As with any investment, we continuously review Eagle's thesis to make sure our reasons for owning it are still valid. They are, and the reward-to-risk is compelling. First, shipping costs limit competition to closely adjacent cement plants, which sustain pricing power, even in a typical down market. Second, home construction has not kept pace with underlying demand for six to seven years, which must be made up over the longer term. Third, Eagle's cost-advantaged East Coast gypsum supply sustains wallboard margins. Fourth, management allocates capital with an ownership mentality to generate excellent long-term returns.

Postmortem/Lessons Learned

At Ballast, we perform a postmortem every year in January, examining each of our investment decisions throughout the prior year – everybody loves this meeting. This review is not self-congratulatory, nor is it about finding the mistakes and who made them – the team owns the decisions, good and bad. It is about getting better. We search for systematic flaws in our decision-making and find fixes to incorporate in our investment process going forward. Since we have written in past letters about rules we have adopted to circumvent cognitive biases we identified in our sell decisions, we figured we ought to share some of our lessons learned for 2018.

Buy Versus Sell Decisions

How do our new buys perform relative to our sells? We asked this question in part because years ago we caught ourselves selling too early. Out of that came an expression we now like to use – "Don't be afraid to be right." Said differently, when your thesis on a company is playing out – be patent and avoid the temptation to sell a stock just because it is going up. We measured the performance of every Sell in the last three

years through the end of 2018 relative to the Russell 2500. Turns out, our Sells outperformed the index by about 200 basis points. Looks like we didn't learn anything, right? Well, hang on, we always reinvest proceeds from Sells and usually need to sell something to fund new Buys, so we need to compare the Sells to the new Buys, which were up 500 basis points relative to the benchmark. It appears our decision-making around selling has improved – take that market bull.

Timing Buys

In the past, we tended to initiate new positions too early, so we looked at how new Buys performed each subsequent quarter from initial purchase (the first 90 days, the second 90 days, etc.). We can compare our new Buy timing across all decisions over time by lining up the quarters. We found that the median new Buy decision was too early half the time, by a couple quarters. Said differently, in the past three years, half the time a new position underperformed the first three quarters we owned it, implying we should have been more patient and waited a couple quarters before initiating the position. Once again, same old mistakes? Nope, turns out the average return for those same stocks during the same first three quarters showed meaningful outperformance. How does that work? Think of median as a hit rate and average as slugging percentage. While our hit rate on timing was only right with a coin flip, over the short term, our winners dramatically outperformed our losers.

The More Things Change

These two results from our 2018 postmortem, (1) our new Buys outperform our Sells and (2) early on, when we are right we make far more than what we give up when we are too early, reconfirm the findings of a study of our performance done years ago. It found our holdings tend to generate greater Alpha earlier in our ownership period. This is one reason we now generally build bigger positions sooner rather than later. Admittedly, this does not address the 50/50 hit rate on early performance of new purchases. At this point we do not see any cognitive biases or commonalities we can solve for that would have prevented us from being early in the cases it did not work out. That does not mean we cannot improve – we can and we do – it just means that, so far, being early half the time seems more a function of uncertainty inherent to each idiosyncratic situation rather than a systematic process flaw. We look forward to tackling this one again next January.

Volatility and Active Share

During the periods of increased downside volatility last year (February, October, December), within our portfolio how did stocks in an index perform versus stocks not in an index? In other words, could fund flows into ETFs and Index funds explain, in part, spikes in Index volatility and our relative outperformance? About a quarter of the stocks we own (by weight) are not held in either of our two benchmarks. It turns out that our non-index-owned stocks exhibited greater volatility during sell-offs than the stocks not held in indexes, which surprised us. The cause appears to be large in-flows into ETF during those months, and especially in December. Said differently, increased *passive* demand for stocks may have dampened volatility for index, and non-index-owned stocks may create risk in certain environments that we did not historically fully appreciate. This is something we will monitor much more closely going forward.

Bingo

Lastly, we were discussing our findings and generally contemplating what other ways we could improve in 2019, when one of our investment teammates who will remain nameless (Tom Fogarty) blurted out "Bingo." Puzzled for a moment, we allowed him to explain. The idea centers around a way to combat cognitive bias. Often cognitive bias is negative because we are not conscious that we are doing it. We use "rules of thumb" or "certainties" drawn from past experiences to make assumptions that we quickly gloss over. A great way to combat these biases is to expose them to a team environment. Given our process of reviewing stocks does just that (group review and consensus agreement), we are already halfway there. The last piece was to come up with a list of the common cognitive pitfalls we often fall into. When a team member accidently and unknowingly trips into one of these bias pitfalls, another member should call out "Bingo" so we can stop right there and remove our thinking from the trap. Why the word *bingo*? I laughed too – until I was reminded about the bull. (I'll get to that.)

Conclusion

I'd like to close this rather long letter on a personal note. Late one summer a number of years ago, I was working on our family ranch with my father, vaccinating our cattle ahead of winter. For those not lucky enough to have experienced this tradition, we would herd cattle through a series of pens that separate and funnel the livestock in single file through a close-quarters "chute." The chute keeps them still, allowing me to vaccinate the animals one at a time without anyone getting injured (them or me).

We were down to our last animal – a large Angus bull with a sour temperament. I was at the gate of the chute ready to give the vaccinations. My father, standing peacefully in the corner of the "jam pen," was calmly talking to the bull, making subtle gestures, and generally taking too long persuading that bull into the chute. It was hot, and I was tired. So, I jumped down into the chute, walked into the jam pen behind the bull, took off my hat to whack the bull on the rump while hollering for him to move. The bull turned quickly, put his head down and flicked me over the tall wooden fence. I landed on my back, coughing up South Texas dust, and more than a little stunned. My father, impassive as ever, simply said, "How 'bout you get back up there and tend your gate, and let me handle this bull?" And so, I did.

What's the point of this story? Well, in life we all make mistakes – sometimes really dumb ones. The point being, even with our process safeguards, we're going to make mistakes, but all of us here at BAM do our utmost to own them, learn from them, and not repeat them. We think this aspect of our culture is foundational to our performance and hope you found our postmortem discussion a useful example of that ethos in action.

Thanks again for your interest in Ballast. If you have any questions about our firm, our People, or our Process, please feel free to reach out.

Thanks,

Ragen Stienke

Important Notes and Disclosures

The investment decisions we make for clients' accounts are subject to various market, economic, and other risks, and there is no guarantee that those investment decisions will always be profitable. Clients are reminded that investing in any security entails risk of loss, which they should be willing to bear. The past performance of the firm or its principal is no guarantee of future results.

Some information contained in this communication was obtained from third-party sources. While these sources are believed to be accurate, that information has not been independently verified.

a. The Ballast Portfolio represents the performance of a proprietary account managed in the firm's model strategy that was launched on August 11, 2015. Gross Performance represents the returns of the account after all expenses, but before deduction of management fees. An individual client's account would be subject to the deduction of management fees in accordance with the Ballast fee schedule. Net Performance represents returns net of all expenses and the highest management fee rate (1%) in the firm's fee schedule. The returns achieved by an individual client's account may vary from those reported for various reasons, including management fee rate, timing of cash flows, frequency of rebalancing of individual accounts, and an individual client's restrictions. Past performance does not guarantee future results.

b. The Russell 2500 Index is a market capitalization weighted index of the 2,500 smallest companies in the Russell 3000 universe of United States equities. Returns shown include the reinvestment of dividends and are based on data obtained from FTSE Russell.

c. The Russell 2500 Value Index measures the performance of those Russell 2500 companies with lower price-to-book ratios and lower forecasted growth values. Returns shown include the reinvestment of dividends and are based on data obtained from FTSE Russell.