SEGALL BRYANT & HAMILL

Return on Invested Capital

Implications of a Sustained Competitive Advantage

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SBH ALL CAP EQUITY RESEARCH PUBLICATION

The United States economy is constantly in a state of change. Approximately 79% of private sector U.S. companies established at least 20 years ago were extinct by 2014, according to the Bureau of Labor Statistics[1]. Corporate failure and survival rates vary by factors such as industry, size, and age, to name but a few, yet there exists a common thread among firms which have thrived – the ability to identify and exploit competitive advantages. Superior management, in turn, is the primary determinant of whether these advantages are funded and remain persistent. Decision making at the executive level, however, can be clouded by numerous obstacles including insufficient marketplace data, behavioral biases, misaligned incentives, or simply a lack of skill.

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The challenge for investors becomes, then, the task of parsing through these management teams to determine who can overcome the organizational hurdles and strategically allocate resources to projects that will generate positive financial outcomes. From the perspective of a shareholder, value is maximized when capital utilization decisions translate into increased and sustainable earnings results. Fortunately, historical spending behaviors have generally proven to be a reasonable preliminary reference for assessing future success.

In June 2014, the Segall Bryant & Hamill Small Cap team shared a white paper titled "Why ROIC is Our Focus"[2], which outlined catalysts through which firms can improve internal capital efficiency and the subsequent implications for investors. In this paper, we expand on the prior research to analyze the shared factors behind firms achieving superior and sustainable ROIC levels. Our quantitative study of these companies within the context of the Russell 3000 Index over the past several market cycles has yielded clear conclusions regarding fiscally sound capital budgeting, and the unmistakable relationship with equity shareholder outperformance.

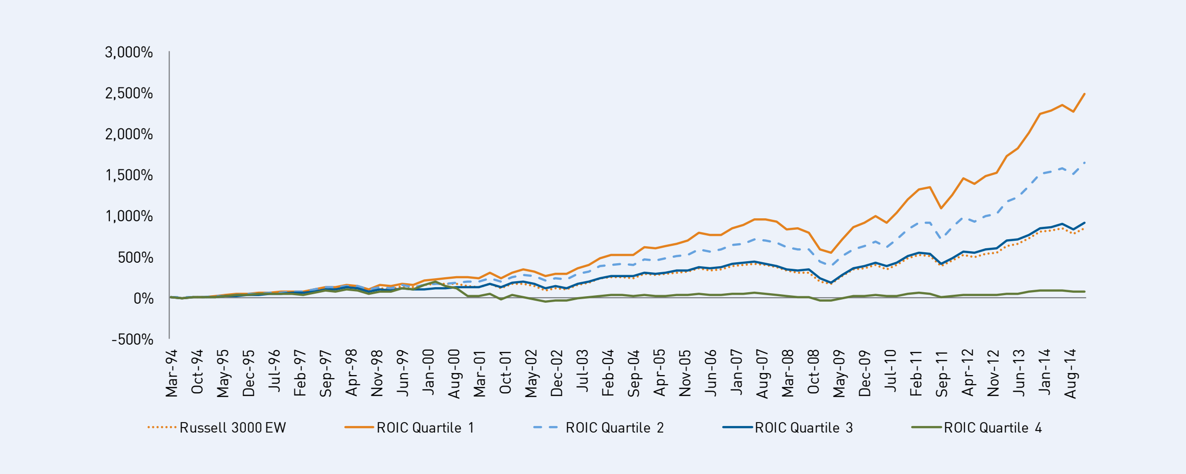
To briefly review, Return on Invested Capital (ROIC) is a measure of cash flow profitability, signifying the after-tax operating income a company produces as a function of the equity and long term debt employed to finance the business. Broadly, the implication of ROIC is rooted in the concept of cash on cash return – success can be measured by a company's proficiency in investing one dollar and consequently generating more than one dollar in the marketplace. From a portfolio construction viewpoint, ROIC can serve as a valuable screening tool as it easily facilitates comparability across companies within a given industry. The metric reaches across both the balance sheet and income statement, accounting for fundamental considerations such as leverage and margins to produce a more complete picture of economic profitability.

Fundamental valuation theory is established on the notion that value is derived from future cash flows discounted to the present at the cost of capital. As we've just mentioned, projected cash flows are a direct function of the return on capital and revenue growth forecasts. In the short run, the expectations of investors can often be more narrowly focused on near term events, putting pressure on the market price that is not necessarily reflective of earnings power. In a recent *Quarterly Review* (First Quarter 2015)[3], we wrote about "thought-viruses" that can briefly infect and influence short term market trends. Over a longer period, however, it is clear that companies focused on strong ROIC levels have successfully put money back in the pockets of their shareholders by means of income and capital appreciation. Investors adept to identifying these firms have been handsomely compensated with a total return 2.93x greater than the market (top ROIC quartile of the Russell 3000 Index vs. the index's equal-weighted return) since 1994, which has translated into an annualized alpha of 6.63. From a risk-adjusted perspective, the return generated hasn't been at the cost of increased volatility (19.3% vs. 22.3% annualized benchmark std. deviation). This attractive risk/reward profile and superior downside protection (89.8% capture) suggests that the market prizes those companies exhibiting sound budgeting to weather various market environments coupled with innovative strategies to consistently outpace peers.

[1] United States Department of Labor, Bureau of Labor Statistics – Survival of Private Sector Establishments by Opening Year; http://www.bls.gov/data/

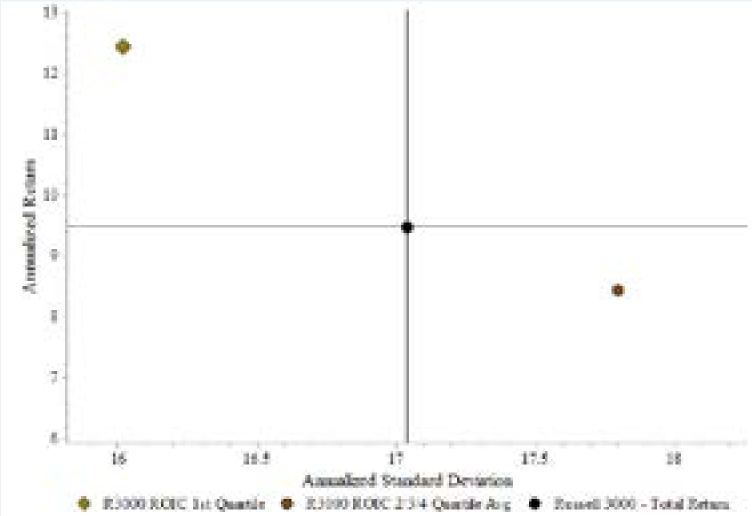
[2] Segall Bryant & Hamill – "Why ROIC is Our Focus"; http://www.sbhic.com/media/white_papers

RETURN ON INVESTED CAPITAL – RUSSELL 3000 (EQUAL-WEIGHTED) CUMULATIVE RETURNS



Source: FactSet & Russell

ANNUALIZED STANDARD DEVIATION VS. ANNUALIZED RETURN

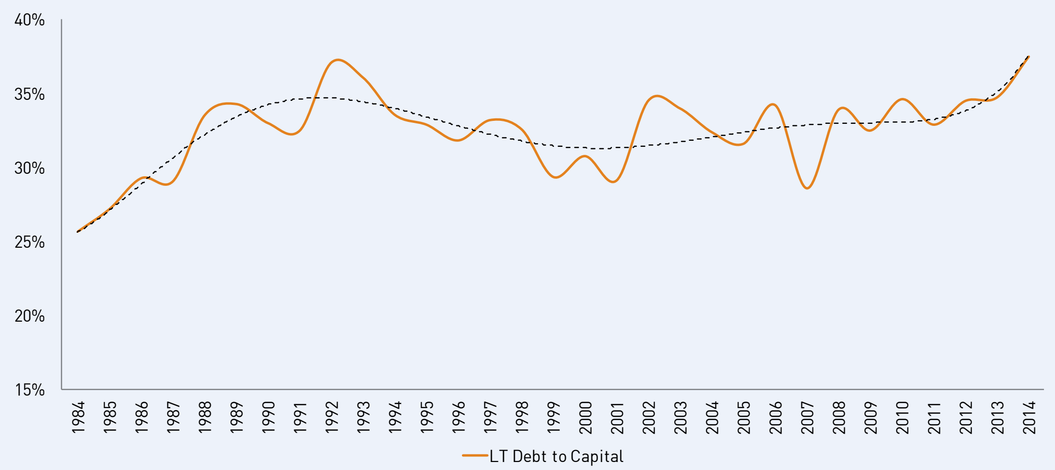


Source: FactSet & Russell

[3] Segall Bryant & Hamill – "1st Quarter Newsletter 2015 – Thoughts on the Current Environment"; http://www.sbhic.com/media/newsletters

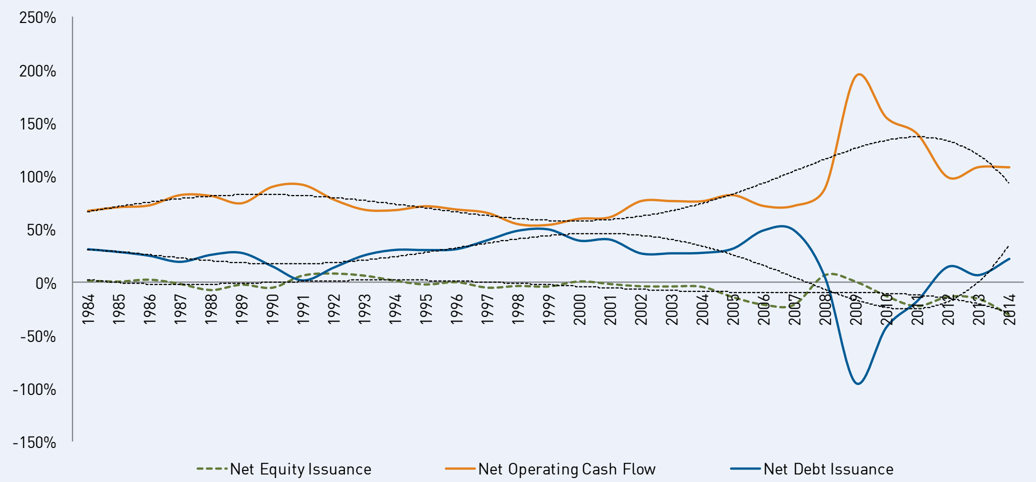
In order to better understand the drivers behind ROIC, it is helpful to recognize where firms are sourcing capital and how they typically use this capital. Over the past 30 years, 85% of funds used for internal investments by companies in the Russell 3000 Index were self-financed from operating cash flows. As observed in the chart below, however, companies have consistently been raising debt and buying back shares over the most recent market cycle. It is possible that this is just "financial engineering", taking advantage of historically low interest rates. Or, it might be the recognition of opportunities to re-invest for growth has become more difficult in the aftermath of the Great Recession of 2008.

CAPITAL STRUCTURE – RUSSELL 3000 UNIVERSE



Source: FactSet & Russell

SOURCES OF CAPITAL – RUSSELL 3000 UNIVERSE



Source: FactSet & Russell

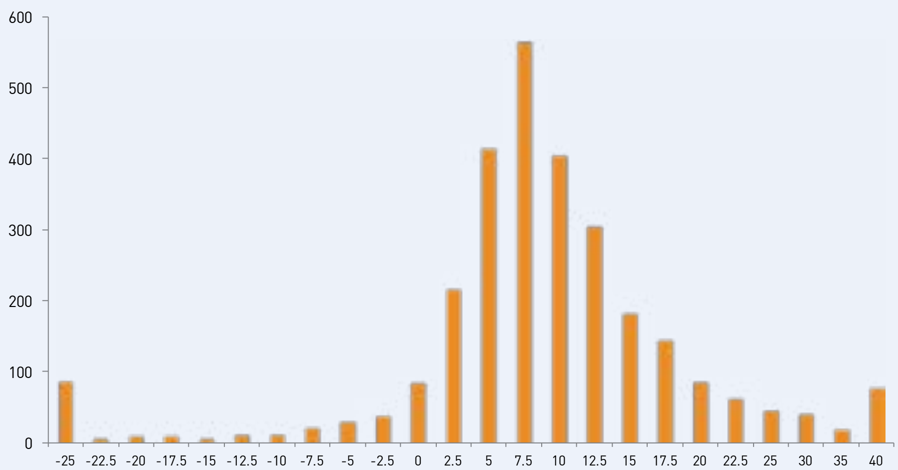
With (relatively cheap) financing available, companies can put money to work in several ways including mergers/acquisitions, capital expenditures (i.e. upgrade equipment), research & development, share repurchases, and paying dividends. Looking at the equity universe on an aggregate level, we observe that Capex was far and away the largest beneficiary of corporate dollars in 2014. In particular, the energy sector accounted for 30.4% of the market's Capex outlays (across public companies) while representing only 7.3% of the market's equity. Until they hit the brick wall of falling oil prices in the second half of 2014, U.S. energy producers found capital expenditures a compelling place to deploy capital.

Any management team can pump money into the business in an effort to generate incremental revenue. The ability to spend resources wisely, turning them into profitable outlays is what sets some companies apart from the herd. So how is high ROIC achieved and what makes it sustainable? Several common characteristics contributing to high ROIC include favorable industry dynamics, distinct company/segment level competitive strategies, and healthy financial statements.

2014 CAPITAL DEPLOYMENT ACTIVITIES OF PUBLIC US COMPANIES ($MM)

Source: FactSet & Russell

RETURN ON INVESTED CAPITAL – BENCHMARK DISPERSION



Source: FactSet & Russell

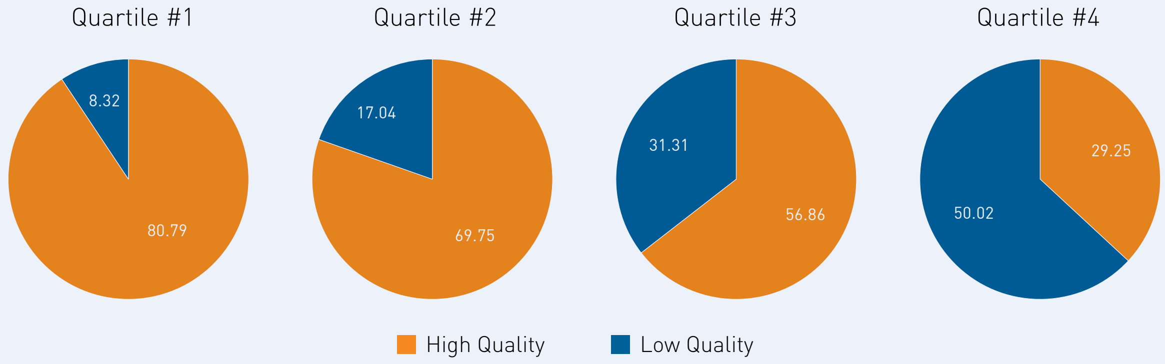
Michael Porter's five forces model[4] for defining an industry's competitive landscape – the power of suppliers, power of buyers, degree of rivalry, threat of substitutes, and threat of new entrants – provides helpful context. These factors are the primary driver that separate industry level ROIC's (i.e. Wireless Telecommunications median ROIC of 1% vs. Leisure Products 16%). Companies which have positioned themselves to minimize these pressures on the business unit level and differentiate through strategies based on price, brand loyalty, scale, quality, and innovation are then able to outperform peers.

Even a cursory look across the Russell 3000 gives us a good proxy for the financial statement prestige of high ROIC firms. Below we've aggregated the top quartile names in every industry, and compared several financial ratios to the universe median levels. These companies are prudent managers of cash (shorter cash conversion cycle), utilize less leverage (as a % of total capital), and operate at higher margins. The S&P Quality Rankings[5], which are a systematic approach to classifying companies based on longterm growth and the stability of a company's earnings and dividends, also supports these conclusions. As of December 31, 2014, 81% of top quartile ROIC companies were rated B+ or better by S&P, whereas only 29% of fourth quartile names met this measure.

Cash Conversion			
FCF Yield % Above/Below R3000 Median	Debt/Capital % Above/Below R3000 Median	Cycle % Above/Below R3000 Median	Operating Margin % Above/Below R3000 Median
28%	**-38%**	**-5%**	**43%**

Working Capital		
Asset Turnover % Above/Below R3000 Median	Turnover % Above/Below R3000 Median	Sales Growth % Above/Below R3000 Median
20%	**7%**	**15%**

RUSSELL 3000 ROIC



Source: FactSet, Standard & Poor's and Russell

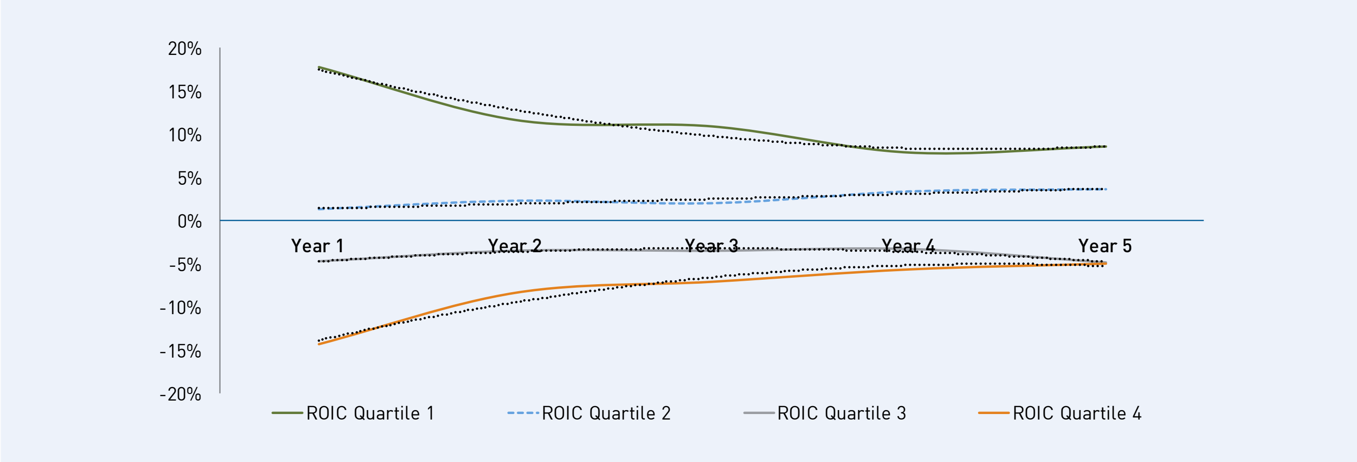
[4] Harvard Business Review, March 1979 – "How Competitive Forces Shape Strategy" (Porter); https://hbr.org/1979/03/how-competitive-forces-shape-strategy

[5] Standard & Poor's – S&P Indices Quality Ratings Index Methodology; www.standardandpoors.com

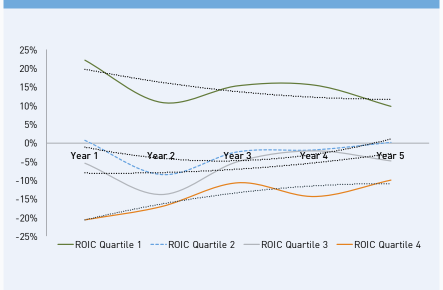
Consistently gaining market share from peers doesn't come without attention. Outsized profitability inevitably attracts new competitors to the industry and almost obliges existing marketplace firms to replicate best practices and increase innovation. The resulting behavior is a reversion to the mean of ROIC's, not necessarily immediately, but often over the course of several years. Through a dissection of the Russell 3000, we have concluded that the top ROIC quartile naturally experiences a 9.21% decay in a given 5 year period while the bottom quartile mirrors this by improving 9.38%. It should be noted that when analyzing ROIC levels, it's important to take sector dynamics into consideration, often because of the capital intensive nature of particular products/services and the impacts this has on the pace of industry shifts (barriers to entry). The difference in deterioration rates across industry market undercurrents and business models is apparent below among Media, Life Sciences, and Utilities companies.

(See charts on next page)

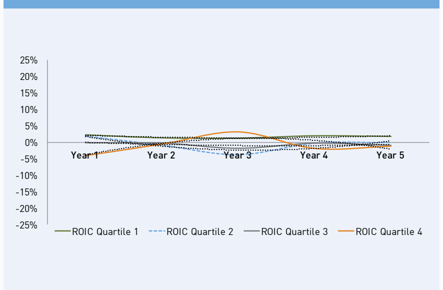
ROIC DECAY & MEAN REVERSION – RUSSELL 3000



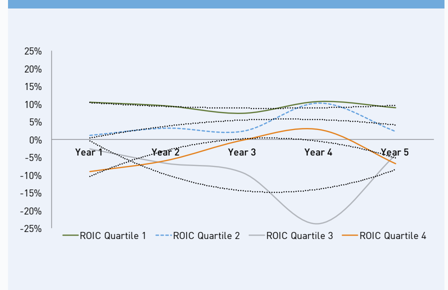
ROIC DECAY & MEAN REVERSION – MEDIA



ROIC DECAY & MEAN REVERSION – MULTI-UTILITIES



ROIC DECAY & MEAN REVERSION – LIFE SCIENCES

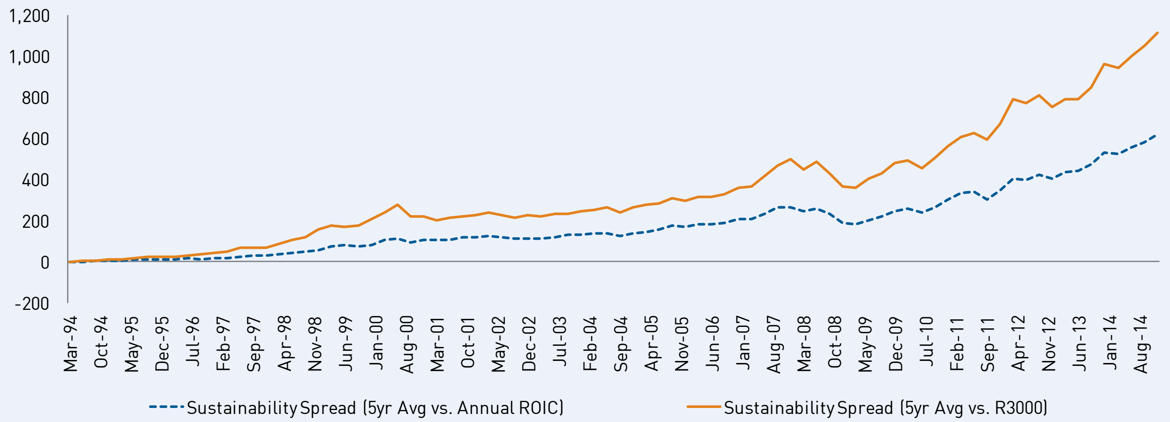


Source: FactSet & Russell

We should not take this finding to conclude that all companies, however fortunate they are today, are destined to become mediocre at best. While some of the top quartile companies certainly notice a decline in capital efficiency, many of the best in breed are able to generate persistent ROIC levels above peers. In fact, of the Russell 3000 constituents from 2004 that generated an ROIC greater than 20%, a noteworthy 60% were able to maintain these levels 10 years down the road. For investors, one take-away comes from analyzing stock market returns for this group. While it might not seem surprising that persistently high ROIC companies have beat the index average, the degree by which the great companies outperform the good companies is. The chart below illustrates the relative performance of companies whose trailing 5-year ROIC average ranks in the top quartile over the trailing 1-year ROIC top quartile (index-weighted).

(See charts on next page)

SUSTAINED ROIC QUARTILES – CUMULATIVE RETURN SPREADS



Source: FactSet & Russell

ROIC IN 2014

	<0%	0-5%	5-10%	10-15%	15-20%	>20%
<0%	84%	7%	2%	2%	1%	2%
0-5%	5%	77%	15%	2%	1%	1%
5-10%	4%	6%	64%	21%	3%	2%
10-15%	5%	3%	16%	45%	20%	11%
15-20%	7%	8%	11%	16%	18%	40%
>20%	8%	4%	7%	12%	8%	60%

Source: FactSet & Russell

While correlations certainly change over time, the strong relationship between sustainable ROIC levels and superior equity performance can be reasonably expected to hold because of the competitive advantages employed by these firms. Perpetually funding projects and business units (and/or divesting unprofitable ventures) that will expand a company's economic moat (against competitive forces) inevitably leads to a self-fulfilling cycle of continued financial success. As we demonstrated, over several market cycles and environments, the market has rewarded the equity shareholders of companies attentively focused on this directive (in the face of short-term 'thought viruses'). By regularly screening for and identifying firms with the potential to sustain above average ROIC levels, investors can form a portfolio of high quality companies with attractive upside. For these reasons, we find that ROIC is a core component of the investment process used by Segall Bryant & Hamill. The All Cap team classifies it as a key tool in our efforts to produce strong investment returns on behalf of our clients.

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