

Our Growth Equity Alpha Thesis: Seeking Risk-Adjusted Excess Returns

By Aziz V. Hamzaogullari, CFA, Chief Investment Officer, Portfolio Manager, Growth Equity Strategies
& Hollie C. Briggs, CFA, Product Manager, Growth Equity Strategies

WHY ALPHA THESIS?

A performance track record cannot readily explain the level of skill employed to achieve the results, or guarantee continued success. We believe a focus on the quality of a manager's investment philosophy, process, and decision-making is essential for assessing the probability of future success.

Our alpha thesis encapsulates a deeply held system of persistent beliefs, a rigorous, repeatable investment process and substantive proof points.

For investors, a major challenge is to identify those portfolio managers who are most likely to deliver superior risk-adjusted returns in the future. Understanding how an investment philosophy informs a manager's decision-making can provide meaningful insights into how and why a particular manager generates alpha.

The search for alpha is the search for skill. We believe our alpha thesis, and our ability to consistently implement its tenets, constitutes a differentiated approach. The deeply held beliefs and disciplined process described in this paper guide what we do every day.

Foundation of Investment Process: Philosophy & Pricing Anomalies

Philosophy: We are an active manager with a long-term, private equity approach to investing. Through our proprietary bottom-up research framework, we look to invest in those few high-quality businesses with sustainable competitive advantages and profitable growth when they trade at a significant discount to intrinsic value.

Pricing Anomalies: At the heart of active management lies the belief that one can deliver returns in excess of benchmark returns. Over the long term, we believe that markets are efficient. Near term, however, we believe innate behavioral biases, such as herding, overconfidence or loss aversion, influence investment decisions and create asset pricing anomalies. These pricing inefficiencies converge toward intrinsic value over time. Market efficiency is thereby dynamic, existing along a continuum between fully efficient and inefficient pricing.



In our view, two important anomalies can best explain periodic mispricing: short-termism and allocative inefficiency. Short-termism is a behavioral bias inherited from our early human ancestors. Today, it causes a reflexive response to short-term market variables that, when viewed rationally, have no impact on long-term value. Allocative inefficiency, an example of herding, describes the breakdown in dynamic price discovery that results when widespread investment decision-making is driven by factors other than valuation. Examples include index or momentum investing and technical trading. Overcoming these natural tendencies is difficult. Consequently, the resultant pricing anomalies persist, creating potential opportunities for active, long-term-oriented, valuation-driven managers like us. Capitalizing on these opportunities requires a disciplined process and a patient temperament.

Key Tenets of Our Alpha Thesis

Our investment philosophy represents our fundamental beliefs regarding the most effective way to generate alpha and leverages our understanding of persistent anomalies that create asset mispricing. These beliefs, or tenets, form the cornerstone of our investment decision-making process and can be linked to performance proof points, demonstrating continuity from belief to process to outcome. Collectively, this integrated system forms our alpha thesis.

TENET	PROCESS	PROOF POINTS
Long-term investor in businesses	Time arbitrage	Low turnover
Develop deep understanding of each investment	7-step bottom-up fundamental analysis (Quality-Growth-Valuation Framework)	High-conviction portfolio with relatively concentrated holdings
Selective investing focused on high-quality companies (Quality)	Starting point is quality of business, not weight of company in the benchmark; look for difficult-to-replicate business models	High active share (typically 80% or higher) and high percentage of wide moat companies in the portfolio
Sustainability of profitable growth drives long-term value creation (Growth)	Identify long-term secular growth drivers; analyze cash flow return on investment	Strong up-market capture with low down-market capture; low turnover
Invest with a margin of safety (Valuation)	Intrinsic value compared to price-implied expectations; purchase price at meaningful discount to intrinsic value; contrarian	Strong up-market capture with low down-market capture; strong risk-adjusted returns
Define risk as a permanent loss of capital	Active risk management; absolute-return oriented	Low down-market capture; standard deviation at or below benchmark
We believe active investment management and active risk management are integral to alpha generation.		

We believe that for any alpha thesis to potentially meet its objective, it should be founded on an enduring philosophy and persistent pricing anomalies. We think our alpha thesis is unlikely to be eroded through arbitrage because it is tied to perennial behavioral biases, not specific market conditions. Beginning on the next page, we explain each alpha thesis tenet in detail.



LONG-TERM INVESTOR IN BUSINESSES

Because we approach investing as if we are buying into a private business, a long investment horizon is central to our philosophy. In our view, a long investment horizon affords us the opportunity to capture value from secular growth opportunities as well as capitalize on the stock market’s shortsightedness through a process called time arbitrage.

LOW TURNOVER

As this table shows, low turnover is a hallmark of our growth equity strategies. Measuring name changes only, our portfolio turnover is even lower.

STRATEGY	TURNOVER
Large Cap Growth	13.2%
All Cap Growth	15.9%
Global Growth	7.3%

The long-term annualized turnover for the large cap growth and all cap growth strategies implies average holding periods of seven and six years, respectively, since inception July 1, 2006. The inception date for the global growth strategy is January 1,

2016. Our low turnover stands in contrast to a widespread escalation in the average manager’s portfolio turnover. In his book *Common Sense on Mutual Funds*, John Bogle documents that from the 1940s to the 1960s, annual turnover for the typical general equity fund averaged just 17%. By 1997, average annual turnover had risen to 85%, and by 2009, it had increased to 105%—a staggering six-fold increase. Bogle states, “The industry has abandoned the wisdom of long-term investing in favor of the folly of short-term speculation.”^{vi} We could not agree more.

In addition to the speculative risks, the trading costs of high portfolio turnover can negatively impact portfolio performance. A 1997 study looking at growth fund returns over 32 years (1962-1993) suggests that for every 100-point increase in turnover, annual return drops by 95 basis points, a figure closely aligned with the net cost of trading.ⁱⁱ A 2007 study updated the analysis and also confirmed that the cost of turnover negatively impacted performance. The table below shows the findings for 990 large cap equity funds from 2001-2006.ⁱⁱⁱ

TURNOVER (%)	7.11	18.31	27.91	38.31	51.31	63.93	80.24	100.44	133.45	356.26
OUTPERFORMANCE (%)	0.59	0.20	0.22	0.24	-0.12	0.01	-0.21	-0.24	-0.46	-0.29

What fuels the culture of short-termism so prevalent today? This innate behavioral bias is exacerbated by the constant, ubiquitous stream of financial “news.” Investors too focused on the short term end up overreacting to company and economic information that we do not believe impacts long-term intrinsic value. Fisher Black calls this activity “noise” trading and posits that it obscures the value estimate of near-term stock prices.^{iv} This is an example of how the widespread use of non-value-focused decision-making can compromise near-term price discovery. We believe that noisy stock prices will converge toward fundamentally driven intrinsic value over time. Therefore, we attempt to identify intrinsic value and through time arbitrage exploit the long-term differential between this value and the market’s current perception.

DEVELOP A DEEP UNDERSTANDING OF EACH INVESTMENT

“...risk varies inversely with knowledge.”^v

-David F. Swensen, Yale University Chief Investment Officer

Our proprietary seven-step research framework is the cornerstone of our investment decision-making process and drives our security selection. The research framework represents our



SEVEN-STEP RESEARCH FRAMEWORK

QUALITY

1. **Sustainable Competitive Advantage**
 - Identify unique elements of a company's business model (e.g., network effect, low cost advantage, strong brand awareness and high switching costs).
 - Can this company defend and sustain its competitive advantage over the long term?
2. **Competitive Analysis**
 - Assess barriers to entry, industry rivalry, power of buyers versus suppliers, and substitution threats.
 - Evaluate the entire value chain and profit pool to discern the structural winners in the long term.
3. **Financial Analysis**
 - Assess balance sheet health (low or no debt is ideal), capital intensity, business mix and margin structure.
 - Require sustainable free cash flow growth, an ability to meet reinvestment needs, and cash flow return on investment above the cost of capital.
4. **Management**
 - Partner with management teams who share our long-term perspective, manage the business with vision and integrity, and whose incentive is aligned with long-term shareholder interests.
 - Evaluate management's ability to allocate capital to investments creating long-term value.

GROWTH

5. **Growth Drivers**
 - Evaluate sources and sustainability of profitable growth.
 - Focus on long-term secular and structural growth drivers—dynamics that aren't likely to change in five years or more.
 - Forecast the growth rate independent of company guidance or Street expectations.

VALUATION

6. **Intrinsic Value Ranges**
 - A company's value depends on its long-term ability to generate profitable free cash flow growth.
 - The present value of future free cash flows is our core methodology for estimating intrinsic value.
 - Conduct sensitivity analysis of key variables to assess downside risk and focus on high-impact drivers of value.
 - Best-, base-, bear- and worst-case valuation scenarios guide the timing of buy/sell decisions and help guard against decision-making pitfalls.
7. **Expectations Analysis**
 - Assess the valuation assumptions implied by the current stock price to differentiate fundamental drivers of value from market sentiment drivers of price. Understand where and how our perspective diverges from that of the market.

long-standing insights about investing and is structured around three key criteria: Quality-Growth-Valuation. Through the disciplined and thorough implementation of bottom-up fundamental analysis, we seek to understand the drivers, opportunities and limits of each business.

Our valuation analysis, which is at the heart of our research and decision-making, is only as good as our ability to understand and identify high-quality companies and evaluate the sustainability of profitable growth. Actively managed portfolios differ from their benchmarks and reflect expectations that diverge from consensus. Importantly, our research framework helps us determine whether our view differs from the consensus, and if so, why. Our contrarian posture requires the ability to act counter to potentially irrational, herd-like and reflexive behavior in the marketplace triggered by emotions like fear and greed. Overcoming these instincts demands a resolve engendered by experience, a disciplined decision-making process, and the temperament to maintain positions that are at odds with popular opinion.

Our investment team culture promotes intellectual honesty, curiosity and independent thinking. An environment in which all assumptions can be challenged by any member of our team can improve our understanding of each investment idea. All research work is vetted through team discussions and includes attempts to disprove the investment thesis as a way to test its validity. This practice helps us overcome the bias in human behavior toward overconfidence that could lead us to overstate the investment's potential. It is crucial to clearly grasp what could go wrong with a company, not just what can go right, in order to minimize downside risk.

All aspects of our investment thesis must be present simultaneously for us to make an investment. Often our research is completed well in advance of the opportunity to invest. We are patient investors and maintain our analysis of high-quality businesses in order to take advantage of meaningful price dislocations if and when they occur. In a typical year we may analyze 30 companies and invest in only a select few. As a result of this rigorous approach, ours are selective, high-conviction portfolios.

We agree with Warren Buffett's assertion that risk comes from not knowing what you're doing.^{vi} In part because we focus on fewer companies and make even fewer decisions, we believe we enjoy an analytical edge.



NUMBER OF COMPANIES PURCHASED IN A YEAR

STRATEGY	2018	2017	2016	2015	2014	2013	TYPICAL # HOLDINGS
Large Cap Growth	2	0	3	1	3	1	30-40
All Cap Growth	3	1	3	2	3	1	35-45
Global Growth	3	2	0	N/A	N/A	N/A	30-45

Anyone could follow our seven-step process. Yet, each person will very likely produce different outcomes. Why? Because we believe that investing is ultimately an art. While a disciplined research framework is foundational to a successful investment strategy, our process does not mechanically supply “the” answer. Rather, it leads us to ask a set of questions that help us discern, through our insights, whether a business meets our key investment criteria. Developing a deep understanding of each investment can also help us manage risk through knowledge.

SELECTIVE INVESTING FOCUSED ON HIGH-QUALITY BUSINESSES

Our Quality-Growth-Valuation investment process begins with the art of trying to identify high-quality companies—those with unique, difficult-to-replicate business models and sustainable competitive advantages. A successful business will attract competition and capital, which over time could shrink profit margins and lower returns on invested capital for the business. A quality business—one with a wide economic moat—can sustain and even extend its competitive advantages so that its profitable growth opportunities are not eroded by the competition. Quality companies also tend to exhibit sound balance sheets, strong returns on invested capital, healthy cash flow growth and highly capable management teams who can efficiently allocate capital.

A focus on investing in high-quality companies can not only help capture upside potential but can help manage downside risk as well. This is an important factor given the number of negative return periods the Russell 3000® Index experienced over a 33-year study period, shown in the table below:

NEGATIVE MONTHLY RETURN	NEGATIVE QUARTERLY RETURN	NEGATIVE YEARLY RETURN
34%	26%	18%

Looking at high-quality and low-quality stocks as defined by Standard & Poor’s (S&P),^{vii} we examined the annual return for each group and compared it to the returns of the Russell 3000. Our analysis shows that the high-quality group of companies’ limited participation in down markets was a significant differentiating factor for superior risk-adjusted returns.

33 YEARS ENDING 2018- RUSSELL 3000 INDEX

Percent of Time

Sources: Source: FactSet. The Russell 3000 is a cap-weighted index. Data through 12/31/2018.

REWARD-TO-RISK ANALYSIS: 1986 - 2018

Past performance is no guarantee of future results.

Annualized total period return and annualized period standard deviation are based on quarterly returns.

Source: Russell Analytics, Standard & Poor’s, Loomis Sayles. Data from 1/1/1986 - 12/31/2018.

QUALITY LEVEL	ANNUALIZED TOTAL PERIOD RETURN	ANNUALIZED PERIOD STANDARD DEVIATION	RETURN-TO-RISK
High-Quality Stocks	11.53%	15.24%	75.66%
Low-Quality Stocks	10.41%	22.95%	45.36%

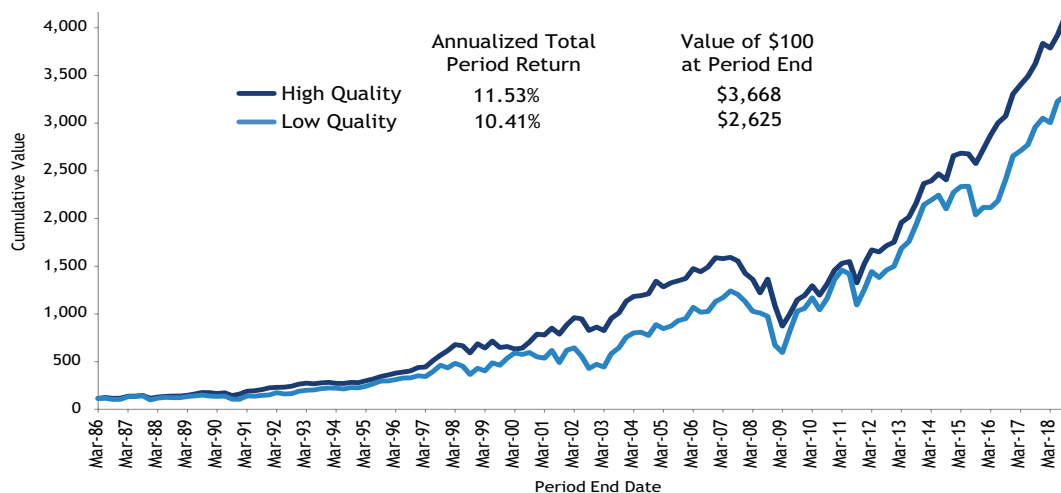
As shown above, while annualized performance of the two baskets was comparable after 33 years, the return-to-risk ratio of the high-quality group of stocks was 75.66%, compared to just 45.36% return-to-risk ratio of the low-quality basket. The chart on the following page provides a long-term cumulative perspective of the two groups’ performance.



PERFORMANCE OF QUALITY BASKETS BASED ON S&P QUALITY RANKINGS

Sources: Russell Analytics, Standard & Poor's, Loomis Sayles. Total returns used. Data through 12/31/2018.

Past performance is no guarantee of future results.



While S&P's quality rankings can provide an interesting overview of how a "quality" universe has performed historically, we do not rely on a third-party methodology to define quality. The companies we invest in must first meet a number of demanding quality standards. At the end of the day, our job is to allocate investment capital to the best opportunities. Our approach is different from benchmark-centric portfolios that tend to begin their investment process by considering the influence of the benchmark's top holdings and sector positioning on relative performance. Because our philosophy and process often result in positions and position sizes that differ from the benchmark, our portfolio typically has an active share measure of 80% or greater.

ACTIVE SHARE

It stands to reason that only portfolios that differ from the benchmark could produce superior returns versus the benchmark.

Why is active share important? In their 2009 paper, "How Active is Your Manager?," Antti Petajisto and Martijn Cremers found that high active share correlates well with excess returns and that the most active managers, those with active share of 80%-100%, persistently generated excess returns above their benchmarks even after subtracting management fees.^{viii} It stands to reason that only portfolios that differ from the benchmark could produce superior returns versus the benchmark. While high active share does not ensure outperformance, we believe it is a necessary condition for generating alpha and outperforming one's benchmark net of fees over the long term. Ultimately, of course, the stocks we select for our portfolio are the sources of any outperformance.

SUSTAINABILITY OF PROFITABLE GROWTH DRIVES LONG-TERM VALUE CREATION

Growth is the next component we consider in our Quality-Growth-Valuation investment process. We are looking not only for above-average growth, but sustainable and profitable growth. Easier said than done, as empirical evidence shows only 10% of companies can sustain above-average growth rates over a four-year period.^{ix} Our systematic approach to measuring a company's growth prospects begins with quantifying the total size of the market into which they can sell their goods and services as well as their current market share. We then assess the company's pricing power, if any, their margin expansion potential, capital requirements and operating leverage. Our objective is to define the company's competitive advantage period in order to determine how long into the future we will estimate the key variables for the business. Our proprietary models are built through bottom-up fundamental analysis. It is important to note that our growth estimate is developed independent of company guidance or Street expectations. To assess the sustainability of the company's



growth rate, we evaluate the drivers of that growth. We are looking for long-term secular and structural growth drivers—dynamics that are not likely to change for five years or longer. The transition of consumer shopping from in-store to online—still only at low-teens penetration rates in the global consumer market—is an example of a long-term secular driver of growth. Developing insights about a company’s growth potential is essential to measuring its future cash flows, its profitability and, ultimately, its intrinsic value.

SUSTAINABLE GROWTH

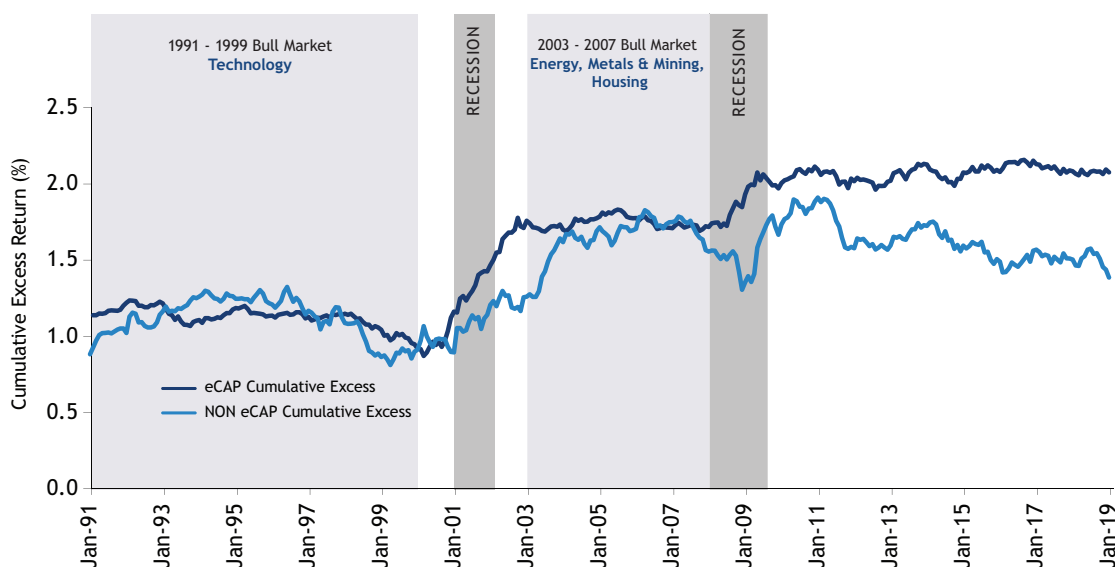
Even when we believe we have identified a quality company with high, sustainable growth rates, we are not yet satisfied: we also require profitable growth.

Even when we believe we have identified a quality company with high, sustainable growth rates, we are not yet satisfied: we also require profitable growth. Just because a company can demonstrate growth in revenues, for example, does not mean it is generating profitable growth. Without profitable growth, there may be no increase in shareholder value and therefore no investment opportunity. The underlying question is whether the cash flow returns generated by management’s investments in the business are greater than or less than the cost of the capital spent on those investments. Therefore, we believe cash flow returns on invested capital (CFROI[®]) is a superior measure of economic performance. Many other investors rely on earnings-per-share (EPS) and price-to-earnings (P/E) multiples to understand a company’s growth rate, recognize investment opportunities, and predict a stock’s future price. Both of these metrics are earnings-based accounting ratios which, in our opinion, limit their reliability since earnings can be different from economic performance and actual cash flows. What’s more, reported earnings can be easily manipulated to the company’s short-term advantage and, given Wall Street’s obsession with quarterly earnings, company managements have been known to do so.

Credit Suisse Holt captured this notion of sustainable and profitable returns by applying its proprietary measures of quality to identify companies that were able to earn superior CFROI over a longer-than-anticipated period. They found that such companies (“eCap” companies) significantly outperformed the market during downturns while keeping pace during up markets, as illustrated in the chart below.

US \$250M+, ECAP VS. NON ECAP RELATIVE TO RUSSELL 3000

Source: Credit Suisse HOLT Analysis. **Universe:** US All ex Micro Caps. **Benchmark:** Russell 3000. Data through 12/31/2018. **eCAPs** is an acronym for Empirical Competitive Advantage Period. **CFROI** is a registered trademark of Credit Suisse Group AG © 2019 or its affiliates in the United States and other countries. **HOLT** is a corporate performance and valuation advisory service of Credit Suisse. All rights reserved. Used with permission.





INVEST WITH A MARGIN OF SAFETY

Valuation analysis is the final component in our Quality-Growth-Valuation investment process. Growth is important, but not growth at any price. And for us, not even growth at a reasonable price will do. We are seeking companies that can generate sustainable and profitable growth and invest only when they are selling at a significant discount to our estimate of intrinsic value. Investing with a margin of safety requires not only a disciplined understanding of a company's intrinsic value but a clear recognition of what the market price implies about consensus expectations for that company's value. Comparing our estimate of intrinsic value to the market price helps expose pricing inefficiencies. We seek to create a margin of safety by investing at a purchase price that is at a meaningful discount to our estimate of a company's intrinsic value. When buying a business, we require at least a 2:1 anticipated upside-to-downside, reward-to-risk opportunity. Holding all else equal, the larger the discount between market price and our estimate of intrinsic value, the greater we view our margin of safety. Counter to the buy discipline of many growth equity managers, we believe the risk of investing in a great company is actually lower after its stock price has fallen, assuming our long-term investment thesis remains intact. Over time, if the market price increases (consensus expectations change) and converges with our estimate of intrinsic value, positive returns are generated. In this way, adhering to this tenet helps us manage downside risk and could increase upside potential.

We believe the discounted net present value of future cash flows is the best estimate of a company's intrinsic value. Because humans tend to anchor too readily to a single outcome or frame decisions too narrowly, we not only forecast our most likely intrinsic value scenario, our base-case price, we also test our assumptions. Through sensitivity analysis on the key variables appropriate to each business, we seek to determine which can drive the largest changes in valuation. We thereby establish a range of outcomes, or scenarios, that we label best case, base case, bear case and worst case. The best-case price represents the scenario in which the company executes successfully on all opportunities for growth. The bear-case price represents the scenario of what could likely go wrong with our base case. Our worst-case price represents the scenario when all goes wrong for the company. By linking our scenario analysis to key business drivers such as market penetration rates or profit margins, we hope to better understand the sources of both value creation and downside risks so that we may make better-informed, more objective decisions.

Our next step is to develop an understanding of the consensus expectations about a company's future cash flows implied by its current stock price. We call this expectations analysis, which reverse engineers the net present value cash flow calculation. That is, we start with the current stock price and solve for implied drivers of cash flow growth and profitability. Recognizing the consensus expectations reflected in the current stock price is crucial because generating alpha is not solely about absolute price-to-value differences. Understanding how our analysis of key variables differs from the price-implied consensus helps us understand how and why the market price, over time, converges toward, or deviates from, our intrinsic value.

With our range of intrinsic value price scenarios and our understanding of price-implied consensus expectations, we have the information we need to make investment decisions. When investing in a company, we look for the most attractive reward-to-risk opportunities. This can occur when the stock price falls into our bear- and worst-case valuation scenarios due to a short-term market inefficiency caused by temporary, nonfundamental situations that in no way impact our long-term investment thesis. In most cases, we gradually scale into a position,



taking advantage of dips in the stock price. Conversely, as the price of a company converges toward our base-case price—when the reward-to-risk opportunity becomes less attractive—we typically begin to reduce our weight in the company and eventually sell the position altogether when the stock price reaches our estimate of intrinsic value. In short, valuation drives the timing of our investment decisions.

Ultimately, our job as an investment manager is to allocate capital to the most compelling reward-to-risk opportunities. Therefore, the more attractive we view the reward-to-risk opportunity, the larger our capital allocation and position weight. In comparison, we have observed that the largest positions of a cap-weighted benchmark may have the least margin of safety—or worse, market prices above intrinsic value—yet are given the largest capital allocations in many benchmark-centric portfolios.

There is one last essential component to successfully implementing this tenet: it demands the temperament—and concomitant discipline—to be a contrarian who can buy into fear and sell into greed. It is not easy to stand alone, apart from the crowd. As Ben Graham said, “Have the courage of your knowledge and experience. If you have formed a conclusion from the facts and if you know your judgment is sound, act on it—even though others may hesitate or differ.”^{xi}

ACTIVE RISK MANAGEMENT

We believe defining risk in relative terms obfuscates the fact that the benchmark itself is a risky asset.

DEFINE RISK AS A PERMANENT LOSS OF CAPITAL

Because we define risk as a permanent loss of capital, we take an absolute-return approach to investing and seek to actively manage our downside risk. More commonly, risk is framed in terms of relative returns and tracking error versus a particular benchmark. While benchmarking investment performance to a specific index began as a tool to help understand and judge portfolio manager performance, this relative-return orientation has morphed into the baseline for acceptable risk and return. Measuring risk, however, must not be confused with managing risk. What’s more, we believe defining risk in relative terms obfuscates the fact that the benchmark itself is a risky asset. This is particularly true with cap-weighted indices because downside risk increases significantly when the stocks of a particular sector experience a run-up in prices that are above (in the case of a bubble, far above) their fundamental intrinsic value. If a portfolio manager ties his investment decisions to benchmark holdings and risk factors, he must necessarily take on this additional downside risk. Because our strategy is to invest in a stock only when its market price is at a significant discount to our estimate of a company’s intrinsic value, we actively pursue both greater upside potential and the possibility of lower downside risk.

Diversification is another important tool in managing portfolio risk or volatility. However, we do not think diversification is the simple notion of more is better. Many investors wonder whether a 30-40 stock portfolio can be sufficiently diversified. Studies dating back to the 1960s have sought to determine how many stocks a portfolio must hold to maximize the benefits of diversification. Results have ranged from 18-30 stocks.^{xii} A 2010 study by Citigroup demonstrated that a portfolio of 30 stocks was able to diversify more than 85% of the diversifiable risk. The diversification benefit of adding more stocks to the portfolio declined significantly as the number of stocks increased. For example, adding 70 more stocks to a 30-stock portfolio improved diversification benefits by just 9%.^{xiii} Legendary growth investor Phil Fisher notes, “Too few people, however, give sufficient thought to the evils of the other extreme (over-diversification). This is the disadvantage of having eggs in so many



baskets that a lot of the eggs do not end up in really attractive baskets, and it is impossible to keep watching all the baskets after the eggs get put into them.”^{xiv}

Cognizant of this risk, we instead seek to enhance risk management by diversifying the business drivers to which our holdings are exposed. We identify the primary business driver through our bottom-up valuation analysis for each company as the growth driver that has the largest impact on our estimate of its intrinsic value. Examples include growth in e-commerce, increased consumer spending in emerging markets, the shift to outsourcing and the ageing population. Because business drivers are imperfectly correlated, the positive impact of one may offset the negative impact of another. This fosters more efficient diversification of risk and helps us keep our attention focused on searching for those few stocks that meet our disciplined criteria.

We agree with Warren Buffett that one of the riskiest things investors can do is to invest in a business they do not thoroughly understand. As a bottom-up fundamental investor, risk management is therefore integrated with our analysis of business models, competitive advantages, operating efficiency, corporate management integrity, profitable growth and valuation. In short, our active risk management process is an integral part of our active investment process.

ALPHA GENERATION

Ultimately, our job as an investment manager is to allocate capital to the most compelling reward-to-risk opportunities.

Conclusion

For any investor, the goal is to identify those portfolio managers who are most likely to deliver superior risk-adjusted returns in the future. In our view, a performance track record cannot readily explain the level of skill employed to achieve the results, or guarantee continued success. We believe a focus on the quality of a manager’s investment philosophy, process and decision-making offers a better method for evaluating the probability of future success. Our alpha thesis encapsulates a deeply held system of persistent beliefs, a rigorous, repeatable investment process and substantive proof points. For alpha generation, the pursuit of greater upside potential and managing absolute levels of risk are inextricable goals. Each tenet of our alpha thesis is designed—individually and collectively—to promote this dual objective for our investors.

This report was originally published in December 2012. We have updated the content as necessary and otherwise believe the information is current and relevant.



Endnotes

- ⁱ John Bogle, *Common Sense on Mutual Funds*, (New Jersey: John Wiley & Sons, Inc., 2010), p. 34.
- ⁱⁱ Mark Carhart, "On the Persistence in Mutual Fund Performance," *The Journal of Finance*, Vol. LII, No. 1, March 1997.
- ⁱⁱⁱ David Blanchett, "The Pre-Tax Costs of Portfolio Turnover," *Journal of Indexes* May/June 2007.
- ^{iv} Fischer Black, "Noise," *The Journal of Finance*, Vol. 41, No. 3, *Papers and Proceedings of the 44th Annual Meeting of the American Finance Association*, New York, New York, December 28-30, 1985, p. 534.
- ^v David F. Swensen, *Pioneering Portfolio Management*, (New York: Free Press, 2009), p. 252.
- ^{vi} 2007 Berkshire Hathaway Annual Meeting Top 20 Questions.
- ^{vii} Standard & Poor's Quality Rankings of common stocks "attempt to capture the long-term growth and stability of earnings and dividends." High quality: companies rated A-minus or better by S&P; Average: Companies rated B+; Low quality: rated B to D & Liquidation.
- ^{viii} Martijn Cremers and Antti Petajisto, "How Active is Your Fund Manager?," *International Center for Finance, Yale School of Management*, 2009.
- ^{ix} Chan, Karceski & Lakonishok, "The Level and Persistence of Growth Rates," *The Journal of Finance*, Volum LVIII, No. 2, April 2003.
- ^x CFROI is a registered trademark of Credit Suisse Group AG © 2019 or its affiliates in the United States and other countries.
- ^{xi} Benjamin Graham, *The Intelligent Investor: A Book of Practical Counsel*, Fourth Revised Edition (New York: Harper & Row, 1973), p. 287.
- ^{xii} Frank K. Reilly and Keith C. Brown, *Investment Analysis and Portfolio Management* (United States: Thomson Learning, 2000), p. 292-293.
- ^{xiii} Citigroup as of 12/31/2010. The R-squared of a portfolio of stocks as a function of the number of stocks in the portfolio, i.e., how much of the portfolio risk is explained by the systemic factors as portfolio size increases. For each value of N (number of stocks), Citigroup randomly simulated 100 portfolios using the S&P 1500 as the starting universe and measured the R-squared of each portfolio. The R-squared value for a given value of N is the average of those 100 values.
- ^{xiv} Philip A. Fisher, *Common Stocks and Uncommon Profits and Other Writings* (New Jersey: John Wiley & Sons, 1996), p. 135.

AUTHORS


AZIZ V. HAMZAOGULLARI, CFA
 EVP, Chief Investment Officer,
 Portfolio Manager, Growth Equity
 Strategies



HOLLIE C. BRIGGS, CFA
 VP, Product Manager, Growth
 Equity Strategies

Disclosure

Past performance is no guarantee of future results.

Diversification does not ensure a profit or guarantee against a loss.

Indices are unmanaged and do not incur fees. It is not possible to invest directly in an index.

This material is provided for informational purposes only and should not be construed as investment advice. Any opinions or forecasts contained herein reflect the subjective judgments and assumptions of the authors only, and do not necessarily reflect the views of Loomis, Sayles & Company, L.P. Investment recommendations may be inconsistent with these opinions. There is no assurance that developments will transpire as forecasted or that actual results will be different. Data and analysis does not represent the actual, or expected future performance of any investment product. Information, including that obtained from outside sources, is believed to be correct, but Loomis can not guarantee its accuracy. This information is subject to change at any time without notice.

Russell Investment Group is the source and owner of the trademarks, service marks and copyrights related to the Russell Indices. Russell® is a trademark of Russell Investment Group.

This information is intended for institutional investor and investment professional use only. It is not for further distribution.

Natixis Distribution, L.P. (fund distributor, member FINRA|SIPC) and Loomis, Sayles & Company, L.P. are affiliated.

LS Loomis | Sayles is a trademark of Loomis, Sayles & Company, L.P. registered in the US Patent and Trademark Office.



This material has been provided for information purposes only to investment service providers or other Professional Clients, Qualified or Institutional Investors and, when required by local regulation, only at their written request. This material must not be used with Retail Investors.

In the E.U. (outside of the UK): Provided by Natixis Investment Managers S.A. or one of its branch offices listed below. Natixis Investment Managers S.A. is a Luxembourg management company that is authorized by the Commission de Surveillance du Secteur Financier and is incorporated under Luxembourg laws and registered under n. B 115843. Registered office of Natixis Investment Managers S.A.: 2, rue Jean Monnet, L-2180 Luxembourg, Grand Duchy of Luxembourg. **France:** Natixis Investment Managers Distribution (n.509 471 173 RCS Paris). Registered office: 21 quai d'Austerlitz, 75013 Paris. **Italy:** Natixis Investment Managers S.A., Succursale Italiana (Bank of Italy Register of Italian Asset Management Companies no 23458.3). Registered office: Via Larga, 2 - 20122, Milan, Italy. **Germany:** Natixis Investment Managers S.A., Zweigniederlassung Deutschland (Registration number: HRB 88541). Registered office: Im Trutz Frankfurt 55, Westend Carrée, 7. Floor, Frankfurt am Main 60322, Germany. **Netherlands:** Natixis Investment Managers, Nederlands (Registration number 50774670). Registered office: World Trade Center Amsterdam, Strawinskylaan 1259, D-Tower, Floor 12, 1077 XX Amsterdam, the Netherlands. **Sweden:** Natixis Investment Managers, Nordics Filial (Registration number 516405-9601 - Swedish Companies Registration Office). Registered office: Kungsgatan 48 5tr, Stockholm 111 35, Sweden. **Spain:** Natixis Investment Managers, Sucursal en España. Registered office: Torre Colon II - Plaza Colon, 2 - 28046 Madrid, Spain. **In Switzerland:** Provided for information purposes only by Natixis Investment Managers, Switzerland Sàrl, Rue du Vieux Collège 10, 1204 Geneva, Switzerland or its representative office in Zurich, Schweizergasse 6, 8001 Zürich. **In the U.K.:** Provided by Natixis Investment Managers UK Limited which is authorised and regulated by the UK Financial Conduct Authority (register no. 190258). This material is intended to be communicated to and/or directed at persons (1) in the United Kingdom, and should not be regarded as an offer to buy or sell, or the solicitation of any offer to buy or sell securities in any other jurisdiction than the United Kingdom; and (2) who are authorised under the Financial Services and Markets Act 2000 (FSMA 2000); or are high net worth businesses with called up share capital or net assets of at least £5 million or in the case of a trust assets of at least £10 million; or any other person to whom the material may otherwise lawfully be distributed in accordance with the FSMA 2000 (Financial Promotion) Order 2005 or the FSMA 2000 (Promotion of Collective Investment Schemes) (Exemptions) Order 2001 (the "Intended Recipients"). The fund, services or opinions referred to in this material are only available to the Intended Recipients and this material must not be relied nor acted upon by any other persons. Registered Office: Natixis Investment Managers UK Limited, One Carter Lane, London, EC4V 5ER. **In the DIFC:** Provided in and from the DIFC financial district by Natixis Investment Managers Middle East (DIFC Branch) which is regulated by the DFSA. Related financial products or services are only available to persons who have sufficient financial experience and understanding to participate in financial markets within the DIFC, and qualify as Professional Clients as defined by the DFSA. Registered office: Office 603 - Level 6, Currency House Tower 2, PO Box 118257, DIFC, Dubai, United Arab Emirates. **In Japan:** Provided by Natixis Investment Managers Japan Co., Ltd., Registration No.: Director-General of the Kanto Local Financial Bureau (kinsho) No. 425. Content of Business: The Company conducts discretionary asset management business and investment advisory and agency business as a Financial Instruments Business Operator. Registered address: 1-4-5, Roppongi, Minato-ku, Tokyo. **In Taiwan:** Provided by Natixis Investment Managers Securities Investment Consulting (Taipei) Co., Ltd., a Securities Investment Consulting Enterprise regulated by the Financial Supervisory Commission of the R.O.C. Registered address: 16F-1, No. 76, Section 2, Tun Hwa South Road, Taipei, Taiwan, Da-An District, 106 (Ruentex Financial Building I), R.O.C., license number 2012 FSC SICE No. 039, Tel. +886 2 2784 5777. **In Singapore:** Provided by Natixis Investment Managers Singapore (name registration no. 53102724D) to distributors and institutional investors for informational purposes only. Natixis Investment Managers Singapore is a division of Natixis Asset Management Asia Limited (company registration no. 199801044D). Registered address of Natixis Investment Managers Singapore: 10 Collyer Quay, #14-07/08 Ocean Financial Centre, Singapore 049315. **In Hong Kong:** Provided by Natixis Investment Managers Hong Kong Limited to institutional/ corporate professional investors only. **In Australia:** Provided by Natixis Investment Managers Australia Pty Limited (ABN 60 088 786 289) (AFSL No. 246830) and is intended for the general information of financial advisers and wholesale clients only. **In New Zealand:** This document is intended for the general information of New Zealand wholesale investors only and does not constitute financial advice. This is not a regulated offer for the purposes of the Financial Markets Conduct Act 2013 (FMCA) and is only available to New Zealand investors who have certified that they meet the requirements in the FMCA for wholesale investors. Natixis Investment Managers Australia Pty Limited is not a registered financial service provider in New Zealand. **In Latin America:** Provided by Natixis Investment Managers S.A. **In Chile:** Esta oferta privada se inicia el día de la fecha de la presente comunicación. La presente oferta se acoge a la Norma de Carácter General N° 336 de la Superintendencia de Valores y Seguros de Chile. La presente oferta versa sobre valores no inscritos en el Registro de Valores o en el Registro de Valores Extranjeros que lleva la Superintendencia de Valores y Seguros, por lo que los valores sobre los cuales ésta versa, no están sujetos a su fiscalización. Que por tratarse de valores no inscritos, no existe la obligación por parte del emisor de entregar en Chile información pública respecto de estos valores. Estos valores no podrán ser objeto de oferta pública mientras no sean inscritos en el Registro de Valores correspondiente. **In Uruguay:** Provided by Natixis Investment Managers Uruguay S.A., a duly registered investment advisor, authorised and supervised by the Central Bank of Uruguay. Office: San Lucar 1491, oficina 102B, Montevideo, Uruguay, CP 11500. The sale or offer of any units of a fund qualifies as a private placement pursuant to section 2 of Uruguayan law 18,627. **In Colombia:** Provided by Natixis Investment Managers S.A. Oficina de Representación (Colombia) to professional clients for informational purposes only as permitted under Decree 2555 of 2010. Any products, services or investments referred to herein are rendered exclusively outside of Colombia. This material does not constitute a public offering in Colombia and is addressed to less than 100 specifically identified investors. **In Mexico:** Provided by Natixis IM Mexico, S. de R.L. de C.V., which is not a regulated financial entity or an investment manager in terms of the Mexican Securities Market Law (Ley del Mercado de Valores) and is not registered with the Comisión Nacional Bancaria y de Valores (CNBV) or any other Mexican authority. Any products, services or investments referred to herein that require authorization or license are rendered exclusively outside of Mexico. Natixis Investment Managers is an entity organized under the laws of France and is not authorized by or registered with the CNBV or any other Mexican authority to operate within Mexico as an investment manager in terms of the Mexican Securities Market Law (Ley del Mercado de Valores). Any use of the expression or reference contained herein to "Investment Managers" is made to Natixis Investment Managers and/or any of the investment management subsidiaries of Natixis Investment Managers, which are also not authorized by or registered with the CNBV or any other Mexican authority to operate within Mexico as investment managers.

The above referenced entities are business development units of Natixis Investment Managers, the holding company of a diverse line-up of specialised investment management and distribution entities worldwide. The investment management subsidiaries of Natixis Investment Managers conduct any regulated activities only in and from the jurisdictions in which they are licensed or authorized. Their services and the products they manage are not available to all investors in all jurisdictions. It is the responsibility of each investment service provider to ensure that the offering or sale of fund shares or third party investment services to its clients complies with the relevant national law.

The provision of this material and/or reference to specific securities, sectors, or markets within this material does not constitute investment advice, or a recommendation or an offer to buy or to sell any security, or an offer of any regulated financial activity. Investors should consider the investment objectives, risks and expenses of any investment carefully before investing. The analyses, opinions, and certain of the investment themes and processes referenced herein represent the views of the portfolio manager(s) as of the date indicated. These, as well as the portfolio holdings and characteristics shown, are subject to change. There can be no assurance that developments will transpire as may be forecasted in this material. Past performance information presented is not indicative of future performance.

Although Natixis Investment Managers believes the information provided in this material to be reliable, including that from third party sources, it does not guarantee the accuracy, adequacy, or completeness of such information. This material may not be distributed, published, or reproduced, in whole or in part.

All amounts shown are expressed in USD unless otherwise indicated.

In Canada: *This material is provided by Natixis Canada LP., 145 King Street West, Suite 1500, Toronto, ON M5H 1J8.*

In the United States: *Provided by Natixis Distribution, L.P. 888 Boylston St. Boston, MA 02199. Natixis Investment Managers includes all of the investment management and distribution entities affiliated with Natixis Distribution, L.P. and Natixis Investment Managers S.A.*

This material should not be considered a solicitation to buy or an offer to sell any product or service to any person in any jurisdiction where such activity would be unlawful.

This document may contain references to third party copyrights, indexes, and trademarks, each of which is the property of its respective owner. Such owner is not affiliated with Natixis Investment Managers or any of its related or affiliated companies (collectively "Natixis") and does not sponsor, endorse or participate in the provision of any Natixis services, funds or other financial products.

The index information contained herein is derived from third parties and is provided on an "as is" basis. The user of this information assumes the entire risk of use of this information. Each of the third party entities involved in compiling, computing or creating index information, disclaims all warranties (including, without limitation, any warranties of originality, accuracy, completeness, timeliness, non-infringement, merchantability and fitness for a particular purpose) with respect to such information.

1138537.7.1
Exp. 5/31/20
MALR023502
LSWP31-0519