Specialists in Complete Capital Structure Analysis®

Eric Green, CFA
Senior Partner,
Senior Portfolio Manager

Matthew Bogdan
Quantitative Research Analyst

A Private Equity Approach to the Public Market

Achieving Low Correlation and High Alpha from Smaller Companies with Complex Balance Sheets

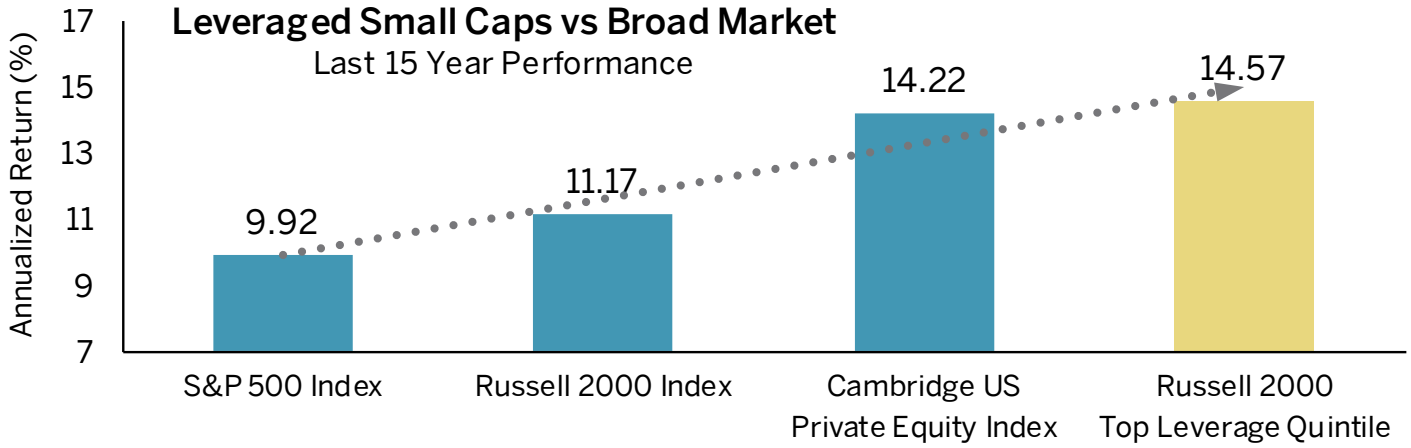
Executive Summary

Public equity has historically operated at a capital structure of roughly 30% debt and 70% equity, with high amounts of research coverage and lower opportunity for an information advantage. Inversely, private equity has operated at 70% debt and 30% equity, with little-to-no research coverage and high information advantage opportunity. A private equity approach to the public market focuses on companies in between.

Underlying drivers of public and private equity returns are more similar than most realize, such as the premium derived from size, leverage, liquidity, and volatility factors. As a result, smaller and underfollowed public companies with higher and more complex utilization of debt have exhibited greater returns in line with private equity. However, these factors are underutilized in the public space as they run counter to the quality bias of conventional wisdom. In this paper, we examine the underlying factors of this anomaly and why a high-yield credit skillset, specializing in leveraged capital structures, is ideally situated to exploit this efficiency.

Topics Addressed

- Complex equity characteristics, outperformance, value catalysts, and risk statistics
- Factors contributing to low research coverage and public market underutilization
- Unique potential for an information advantage with proprietary research
- Targeting market inefficiencies using a combination of factors to produce alpha



PENN CAPITAL

As of December 31, 2017. Source: Bloomberg. Morningstar Direct. Leverage quintile measured by debt to capitalization ratio ex financial sector due to greater usage and unique utilization of debt from other sectors

A Private Equity Approach to the Public Market

Utilization of complex, underfollowed, and information advantage factors provide opportunities for alpha generation from market inefficiencies.

Targeting Market Inefficiencies

Complex Balance Sheets

Contrary to conventional wisdom, smaller companies with higher and more complex utilization of leverage have significantly outperformed their less-leveraged counterparts.

Underfollowed Companies

Companies are primarily underfollowed by market research analysts because of leverage and size factors due to the required skillset, lack of investment banking opportunities, and lower trading volumes.

Information Advantage

A variety of proprietary techniques are utilized to collect information ignored by most investors to produce a comprehensive mosaic and better determine underlying value.

Unique Catalysts with Low Correlation Return Profile

5 Year Return Correlation Matrix by Russell 2000 Factor Index

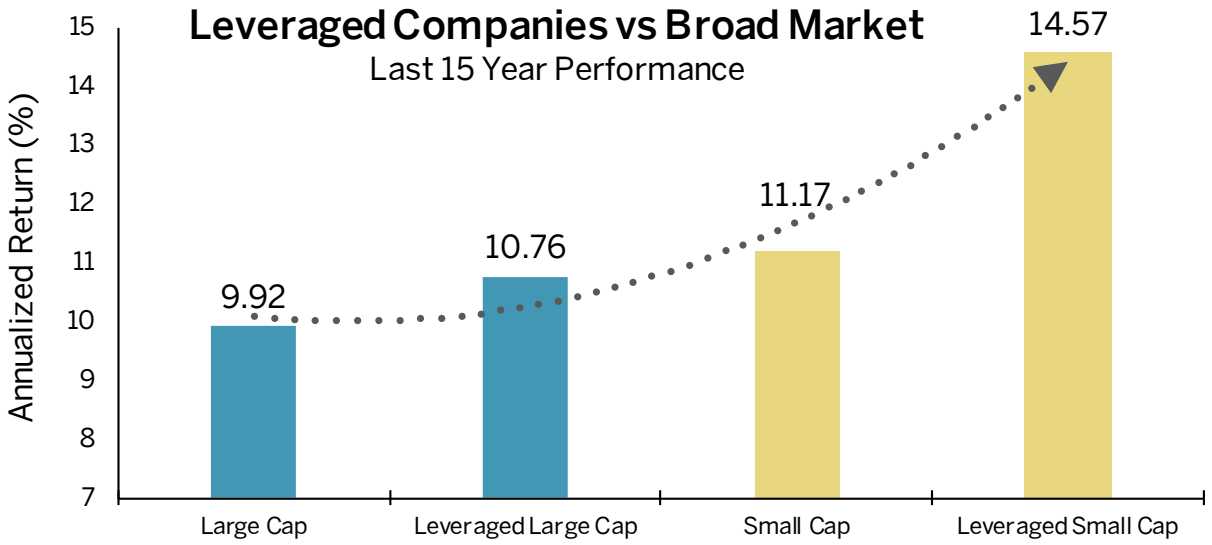
Russell 2000 Leverage	1.00												
Russell 2000 Multi Factor	0.49	1.00											
Russell 2000 Defensive	0.51	0.99	1.00										
Russell 2000 Dividend	0.55	0.96	0.98	1.00									
Russell 2000 Div Growth	0.48	0.91	0.92	0.90	1.00								
Russell 2000 Momentum	0.56	0.95	0.96	0.97	0.84	1.00							
Russell 2000 Quality	0.52	0.98	0.99	0.98	0.88	0.98	1.00						
Russell 2000 Value	0.51	0.98	0.97	0.97	0.88	0.96	0.98	1.00					
Russell 2000 Volatility	0.52	0.98	1.00	0.98	0.91	0.97	0.99	0.98	1.00				
Russell 2000 Yield	0.50	0.96	0.96	0.97	0.92	0.93	0.95	0.97	0.97	1.00			
Russell 2000 Growth	0.55	0.90	0.91	0.94	0.76	0.98	0.95	0.91	0.93	0.87	1.00		
Russell 2000 Dynamic	0.54	0.89	0.89	0.93	0.74	0.97	0.94	0.93	0.91	0.88	0.98	1.00	
Russell 2000 Index	0.54	0.96	0.97	0.98	0.84	0.99	0.99	0.98	0.97	0.94	0.98	0.98	1.00

5 Year return correlation by factor as of December 31, 2017. FOR ILLUSTRATIVE PURPOSES ONLY. The index information and data contained herein was obtained from FTSE Russell.

As of December 31, 2017. Source: Bloomberg. Morningstar Direct, FTSE Russell. Russell 2000 Leverage measured as top quintile debt to capitalization ratio ex financial sector due to greater usage and unique utilization of debt from other sectors

Complex Balance Sheets

Contrary to conventional wisdom, smaller companies with higher and more complex utilization of leverage have significantly outperformed their less-leveraged counterparts.



Return (%)	9.92	10.76	11.17	14.57
Std. Deviation (%)	13.26	16.00	18.24	22.01
Sharpe Ratio (%)	0.69	0.62	0.61	0.66
Sharpe Delta (%)	-0.07		+0.05	
	Leverage Less Effective		Leverage More Effective	

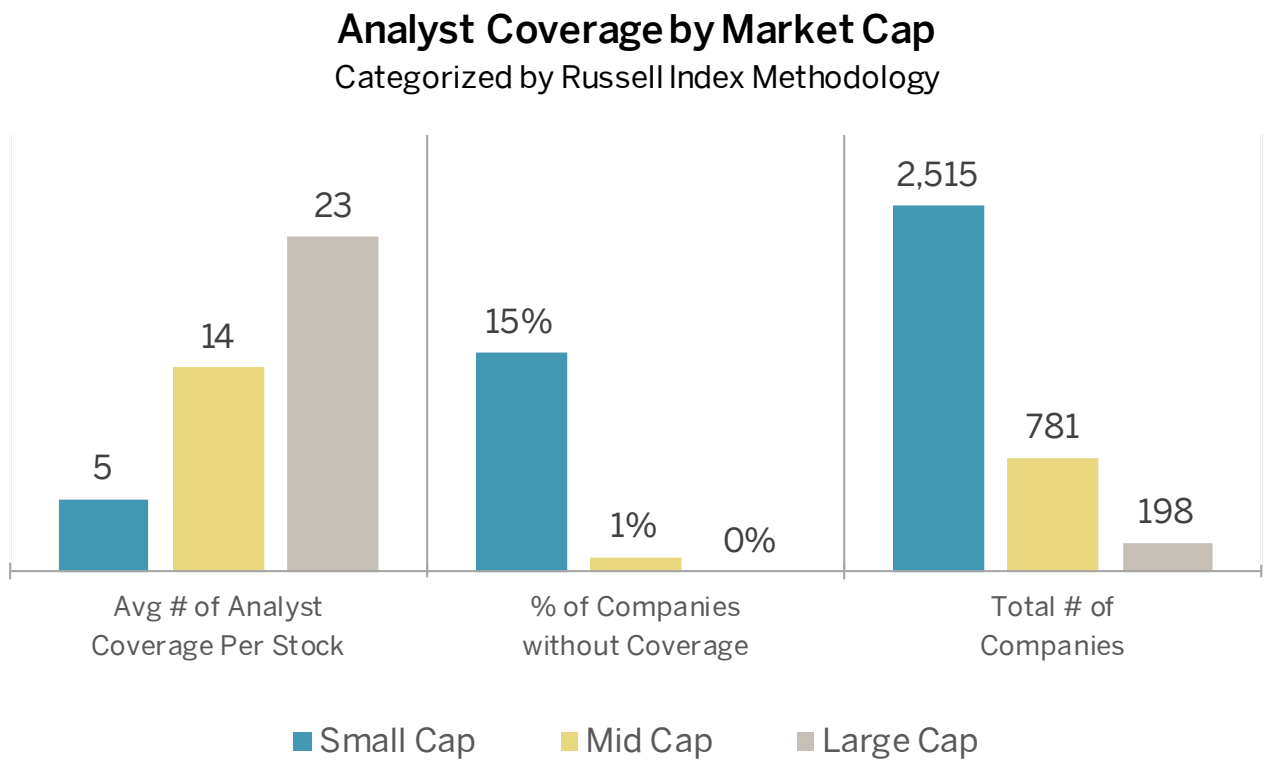
Further Insight

- **High-Yield Credit Analysts** specialize in leveraged cap structure; ideal skillset to exploit inefficiency with identification of debt catalysts impacting equity value
- **Outperformance** of broader market can be observed using the top leverage quintile of the Russell 2000 Index as a proxy
- **Greater Risk and Return** as leverage acts as a catalyst for success or failure; success rates maximized at 5 to 7 year holding periods
- **Greater Upside** potential of smaller companies drives outperformance; leverage less effective factor for large cap companies

As of December 31, 2017. Source: Bloomberg. Indices: Large Cap: S&P 500, S&P 500 Top Leverage Quintile by Debt to Capitalization Ratio, Small Cap: Russell 2000, Russell 2000 Top Leverage Quintile by Debt to Capitalization Ratio. Leveraged index returns are ex financial sector due to greater usage and unique utilization of debt from other sectors

Underfollowed Companies

Smaller companies are primarily underfollowed by market research analysts because of leverage and size factors due to the required skillset, lack of investment banking opportunities, and lower trading volumes.



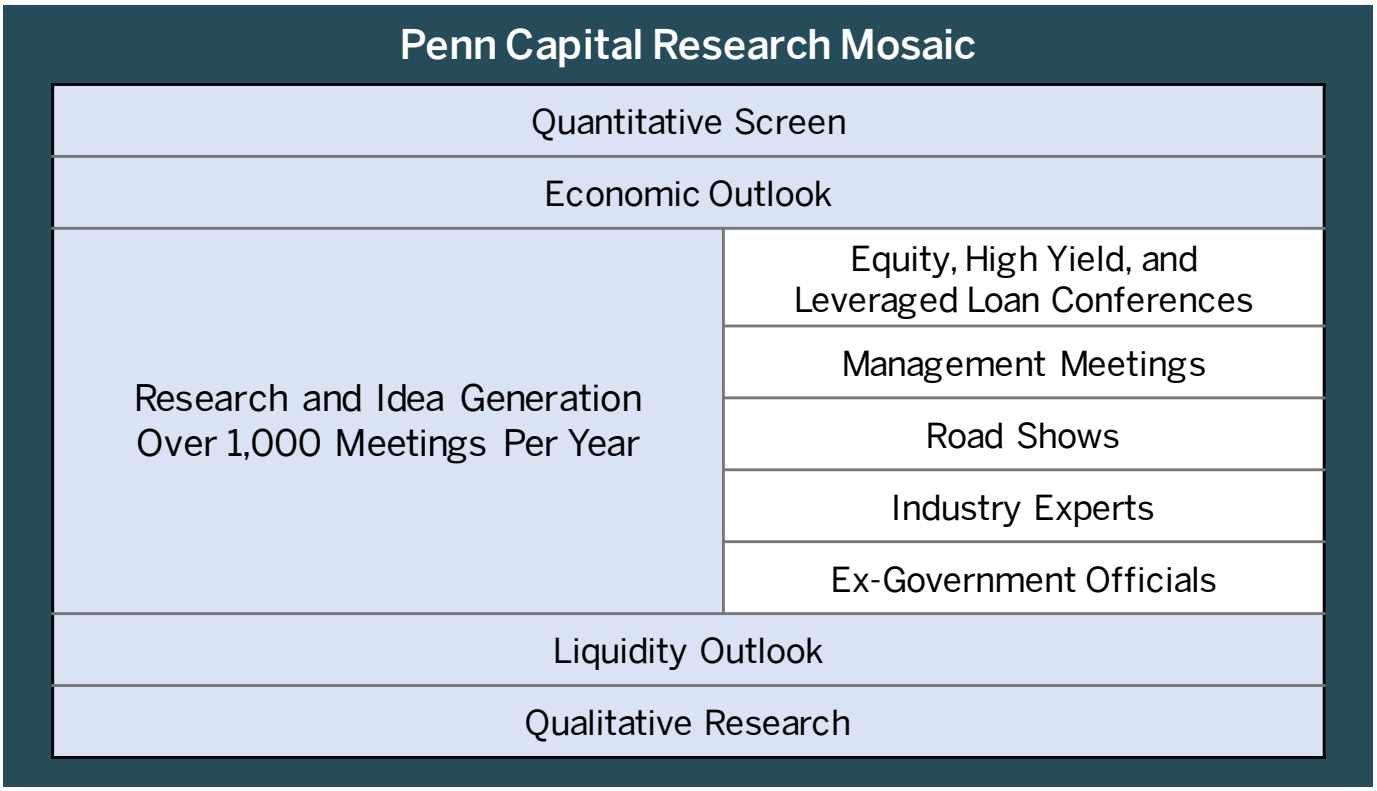
Further Insight

- **Smaller Market Cap** equities receive less focus as brokerage firms cut back on research with less commission potential
- **Higher Leverage** utilization requires analysis of debt catalysts which equity analysts typically avoid
- **Higher Volatility** and leverage factors run counter to conventional wisdom of strong balance sheet bias, leading to less attention
- **Smart Beta** passive instruments focus on factors with high and intuitive marketability, resulting in size and quality bias

As of December 31, 2017. Source: FTSE Russell, FactSet. Russell Market Cap Methodology: Companies # 1-200 Large Cap, #201-1,000 Mid Cap, #1,001-4,000 (or 100% of eligible securities) Small/Micro Cap.

Information Advantage

A variety of proprietary techniques are utilized to collect information ignored by most investors, producing a comprehensive mosaic to identify intrinsic value.



Further Insight

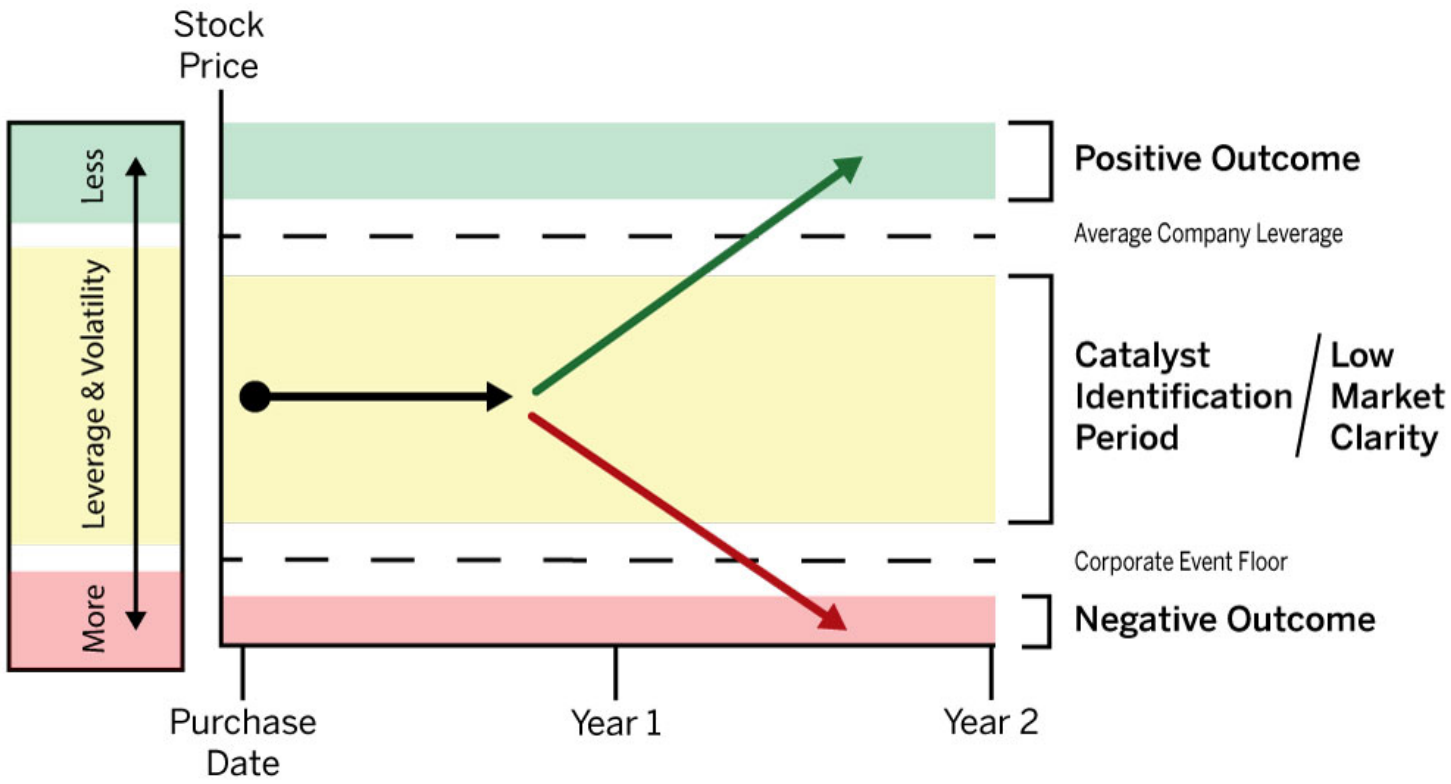
- **Reduced Industry Research** on smaller market cap companies enhances value of proprietary research, which can provide otherwise unavailable data points
- **Increased Passive** driven pricing instead of underlying fundamentals enhances inefficient pricing potential
- **70% of Stocks in High Yield Companies*** have small (sub $5bn) market capitalizations, enhancing synergy of cross-over analysis
- **Credit Profile and Complete Capital Structure Analysis®** generally not performed by equity analysts due to lack of credit focus and required skillset

*Credit Suisse High Yield Index (companies with capitalizations below $5bn) as of December 31, 2017

Targeting Market Inefficiencies

A combination of complex, underfollowed, and information advantage factors provide opportunities for alpha generation. Earnings potential, fundamentals, and credit ratings improve as deleveraging companies move toward their optimal capital structure and receive higher market valuations.

Leveraged Equity Investment Lifecycle Example

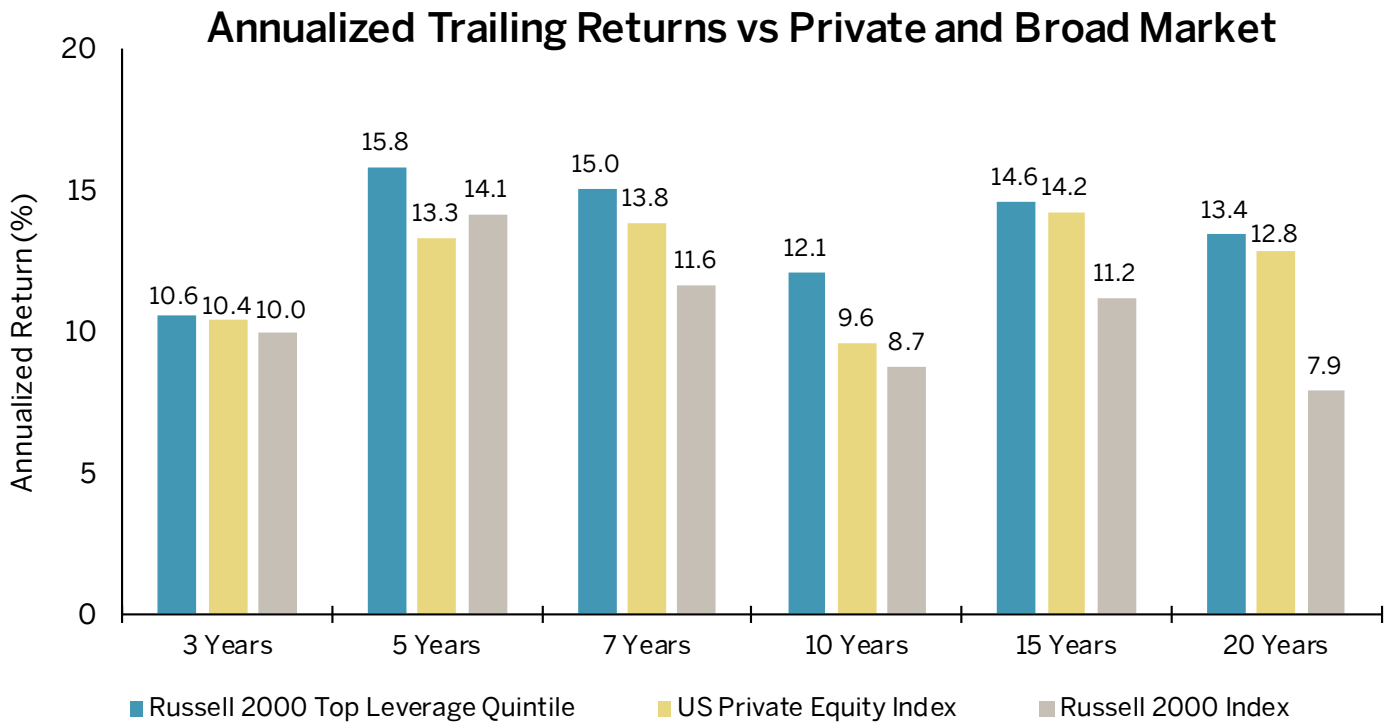


Further Insight

- **Compilation** of three main factors to provide greater depth of research analysis, comprehensive mosaic, and catalyst targeting in low market clarity periods
- **High Yield Skillset** utilized to identify debt catalysts – paydowns, refinancing, covenant amendment/ breach, liquidity – before impact to equity value
- **Disciplined** and long-term methods of proprietary data accumulation provide structure for opportunity identification
- **High Active Share** and tracking error versus broad market, targeting unique catalysts to provide alpha with low market correlation

Conclusion – Private Equity Performance with Low Correlation to Traditional Factors and Broad Market

A private equity approach to the public market enhances the efficient frontier with a differentiated and high-alpha return profile targeting unique market factors.



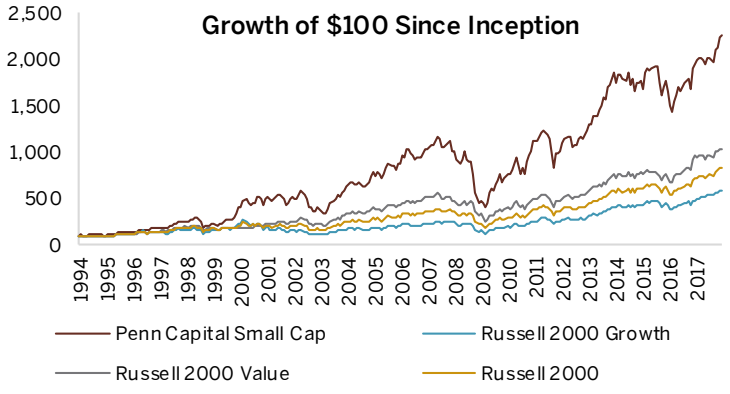
Further Insight

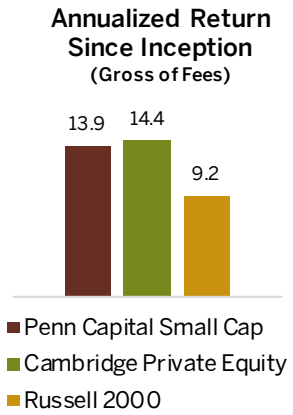
- **Private Equity-Like Performance** over the long term due to size, leverage, and volatility risk premium with greater M&A experience
- **Public Market Benefits** versus private equity with no capital lock-up or 2/20 fee structure while offering daily pricing transparency and liquidity
- **Leveraged Capital Structure Specialists** with high yield skillset ideally situated for early identification of value creating or destroying catalysts
- **Goes Against the Herd** by targeting leverage and size factors counter to conventional wisdom of quality bias

As of December 31, 2017. Source: Morningstar Direct, Bloomberg. Indices: Cambridge US Private Equity which is net of fees, Russell 2000, Russell 2000 Factor Indices, Russell 2000 Top Leverage Quintile by Debt to Capitalization Ratio. Leveraged index returns are ex financial sector due to greater usage and unique balance sheet treatment/utilization of debt from other sectors

Penn Capital Small Cap Equity Strategy

A Private Equity Approach to the Public Market for Over 20 Years





As of 12/31/2017, Source: Morningstar Direct, Inception Date: 1/1/1994

Firm Information: Penn Capital Management Company, Inc. ("Penn Capital") is a Pennsylvania based investment advisor registered with the U.S. Securities and Exchange Commission under the Investment Advisers Act of 1940. Penn Capital is a 100% employee owned sub-chapter-S corporation. Penn Capital specializes in managing equity and fixed income portfolios for institutional and high net worth clients. Penn Capital's fully integrated process allows for strong crossover ideas between fixed income and equity, enabling Penn Capital's investment team to become experts in Complete Capital Structure Analysis® of a company. Penn Capital claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS® standards. Penn Capital has been independently verified for the periods January 1, 1994 through December 31, 2017. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. The Small Cap Equity Composite has been examined for the periods January 1, 1994 through December 31, 2017. The verification and performance examination reports are available upon request by email to clientservice@penncapital.com. Penn Capital's fee schedule varies based upon the investment style. As disclosed in Penn Capital's Form ADV, Part 2A, the stated fee schedule for all separate Small Cap Equity accounts is 1.00% of assets under management.

Composite Characteristics: The Small Cap Equity Composite is defined to include separate accounts with assets over $1,000,000. These accounts solely invest in equities of U.S. companies at initial purchase with market capitalizations less than $2.5 billion or the maximum market capitalization of the Russell 2000 Index, whichever is greater. The Small Cap Equity strategy seeks superior investment returns that are attainable on a consistent basis by applying a disciplined value-driven investment approach, which capitalizes on fundamental and technical opportunities in the market. The Small Cap Equity Composite was created on December 31, 1992. Effective January 1, 2010, accounts which have a significant cash flow (20% or more on the transaction date) will be removed from their respective composite immediately. The account will be reevaluated monthly and if eligible, will enter their appropriate composite the next calendar quarter's opening. Effective November 1, 2012, accounts are eligible to re-enter the composite at the end of the following month. The Small Cap Equity Composite is comprised of all separate accounts that have been managed by Penn Capital for one full calendar quarter.

Calculation Methodology: The Small Cap Equity composite is shown as total returns, which assumes reinvestment of dividends and capital gains, with no reductions for taxes, presented before the deduction of actual investment advisory fees, calculated in U.S. dollars, and computed on a dollar-weighted-rate-of-return-basis. Performance results have been presented both prior to the deduction of investment advisory fees ("gross of fees") and after the deduction of actual investment advisory fees and all applicable performance fees ("net of fees"). For example, an account with a compounded annual total return of 10% would have increased by 159% over ten years. Assuming an annual advisory fee of 1.0%, this increase would be 137%. Internal dispersion is calculated using the asset-weighted standard deviation of all portfolio that were included in the composite for the entire year. Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request. All returns are calculated net of transaction costs and gross of custodial fees and taxes on dividends and interest.

Other Disclosures: To receive a complete list and description of Penn Capital's composites and/or presentations that adhere to the GIPS® standards, contact Client Service by e-mail at clientservice@penncapital.com or write to Client Service at Penn Capital, Navy Yard Corporate Center, 1200 Intrepid Avenue, Suite 400, Philadelphia, PA 19112. The Russell 2000 Index (the "Index") is comprised of the 2,000 smallest companies in the Russell 3000 Index, representing approximately 11% of the Russell 3000 total market capitalization. For comparison purposes, the Index is a fully invested index, which includes reinvestment of income, and its performance has been linked in the same manner as the Small Cap Equity Composite. The returns for this unmanaged index do not include any transaction costs, management fees or other costs. Index returns are not covered by the report of independent verifiers. The information contained herein reflects historical performance; no assurances can be given and no inferences should be drawn with respect to any future results that may be achieved by clients of Penn Capital.

Morningstar collects information directly from investment management firms and other sources believed to be reliable. Morningstar does not guarantee or warrant the accuracy, timeliness, or completeness of the information provided and are not responsible for any errors or omissions. Performance results may be provided with additional disclosures available on our systems and other important considerations such as fees may be applicable. Not for general distribution.

All returns are calculated net of transaction costs and gross of custodial fees and taxes on dividends and interest. For use with institutional investors and financial intermediaries only. Not for distribution to or use with individual investors. The contents may not be reproduced in whole or in part or otherwise made available without the prior written consent of Penn Capital.

This document has been prepared solely for informational purposes. The information presented herein is not to be used or considered as an offer or invitation to sell or issue or any solicitation of any offer or invitation to buy securities or other financial instruments, or any advice or recommendation with respect to such securities or other financial instruments. No information is warranted or guaranteed by Penn Capital or its affiliates as to its completeness, accuracy, or fitness for a particular purpose, express or implied. Information presented is subject to change at any time due to market, economic, regulatory or other changes. Any comments or statements made herein may reflect the opinions or commentary of the person(s) who prepared them, and therefore may not necessarily reflect those of Penn Capital. Penn Capital may have issued, and may in the future issue, other communications that are inconsistent with, and reach different conclusions from, the information presented herein. Those communications reflect the assumptions, views, and analytical methods of the person(s) that prepared them. These materials are not intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Penn Capital to any registration or licensing requirement within such jurisdiction. To the extent permitted by applicable law, Penn Capital accepts no liability for any loss arising from the use of the material presented herein. Penn Capital may, to the extent permitted by law, act upon or use the information or opinions presented herein, or the research or analysis on which they are based.

As of December 31, 2017. * Total combined assets include model advisement, discretionary, and non-discretionary

Firm Overview

Independently Owned, Investment-Driven Culture

- Founded in 1987; Headquartered in Philadelphia
- 62 total employees; 29 partners
- 24 member investment team and $4.2 billion in Total AUM*

Specialists in Capital Structure Investing

- Fully integrated credit and equity investment team
- Fundamental, bottom-up proprietary research process
- Over 1,000 company management meetings per year

Investment Philosophy and Characteristics

- High Conviction – High Active Share
- Capacity Constraints – Liquidity Advantage and Style Integrity
- Client Focused – Partnership in Developing Custom Solutions

Investment Vehicle Availability

- Institutional Mutual Funds
- Institutional Limited Partnership
- Institutional Separate Accounts

Contact Information

215-302-1500
info@penncapital.com

The subject matter contained herein has been derived from several sources believed to be reliable and accurate at the time of compilation, but no representation or warranty (express or implied) is made as to the accuracy or completeness of any of this information. Under no circumstances should this information be construed as a recommendation or advice. The views expressed herein reflect the professional opinions of the portfolio managers, are as of the date referenced above and are subject to change. Penn Capital does not accept any liability for losses either direct or consequential caused by the use of, or reliance upon, this information.