Micro-Cap Stocks:
An Overlooked Alternative to Private Equity

Executive Summary

Among public equities, actively managed micro-cap value strategies have traditionally served as a destination for investors seeking attractive risk-adjusted returns. When looking at long-term performance, however, historic trends suggest that micro-cap stocks may actually be better compared to private equity investments. And for a number of reasons, we anticipate that publicly held micro-caps will continue to offer returns that exceed those of average private equity fund investments, providing a compelling alternative for investors seeking an analogous and often superior return profile.

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Catalysts Supporting Micro-Cap Outperformance

- **Capital Flows:** With market capitalizations of $750 million and under, our universe of micro-cap stocks consists of approximately 8,600 companies, yet the amount of institutional capital dedicated to the micro-cap category has remained largely static since 2008. The private equity asset class, on the other hand, continues to attract capital faster than sponsors can deploy it, creating an imbalance that favors the inefficiencies found in the micro-cap segment.
- **Leverage:** As is implied by the term leveraged buyout, private equity firms rely on debt as a critical component of their investment thesis. As such, private equity-backed companies can carry added risk when compared to securities in the micro-cap segment, where companies generally employ a conservative capital structure.
- **Valuations:** The inefficiencies inherent to the micro-cap universe, due to a smaller pool of dedicated capital and neglect on the part of the analyst community, result in stock prices that often do not reflect the intrinsic value of the underlying assets or the potential for growth. Private equity funds, while they stand to benefit through active ownership, have increasingly built their portfolios through competitive auctions, a factor that serves to mitigate the value sponsors would otherwise capture at the time of their investments.
- **Volatility Opportunity:** While stocks in the micro-cap segment are characterized by short-term price volatility, for actively managed value-oriented funds, the price movement presents a compelling opportunity to find attractive entry valuations for high-quality stocks. Moreover, the robust M&A activity in the segment, augmented by private equity participation, maximizes the potential for value creation.
- **Fee Structure:** As a result of these, and other characteristics, micro-cap stocks can offer returns for investors in actively managed value strategies that exceed private equity fund investments, absent the inflexibility of a multi-year lockup and costly fee structure that is common to PE limited partnership arrangements.

Outperformance

Historical analysis shows that over time, actively managed, value-oriented micro-cap funds tend to outperform private equity. Data from alternative-asset analytics provider Preqin, for instance, quantifies that since the start of 2001 to September of 2014, the All Private Equity Index increased by 189 percent. While that represents an attractive return on investment and well exceeds the 96% return of the S&P 500 Index during the corresponding period, the Russell Microcap® Index, by comparison, grew by 219 percent.

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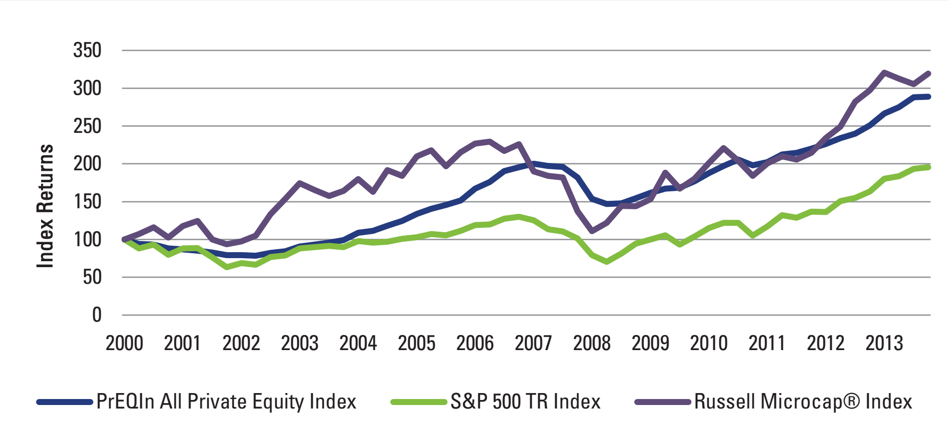
Figure 1: Public Equity versus Private Equity Returns



Source: www.preqin.com; www.spindices.com; www.russell.com. March 2015.
It is not possible to invest directly in an index. Past performance is not an indication of future results.
Please refer to the back page of this booklet for other important information.

Over the intermediate term, micro-caps have proven to be similarly appealing, and over the three- and five-year periods, the Russell Microcap® Index has logged returns of over 22% and 13.5%, respectively, again outperforming Preqin's All Private Equity Index.

Figure 2: Private Equity versus Micro-Cap Returns

Source: www.preqin.com; www.russell.com. March 2015.
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It's interesting to note that while micro-cap stocks tend to outperform private equity, the two categories share similar performance trends. The comparable return profiles are not a coincidence. Active managers in micro-cap stocks often target similar assets as financial sponsors, seeking value-oriented investments in businesses with consistent cash flows and strong fundamentals.

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Capital Flows

In spite of the outperformance, micro-cap stocks can often be overlooked by institutional investors, as the market caps of these companies can't accommodate the size of investment that most large pensions or asset managers would require to influence fund performance. Correspondingly, micro-cap stocks are often ignored by the analyst community and even the media, which only adds to the inefficiency of the category.

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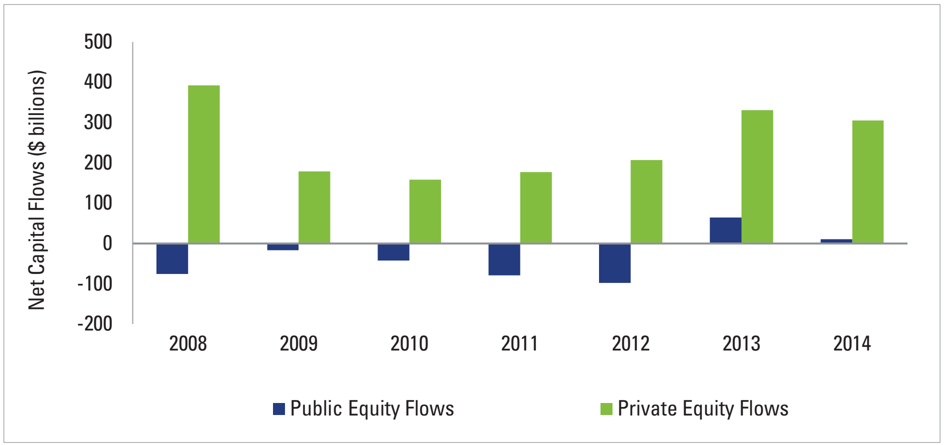
Moreover, in just looking at the flows into public stocks versus private equity, an influx of capital has consistently moved into buyout funds over the past decade, whereas capital flows into U.S. public equities have largely remained static since 2008. Private equity funds, for instance, have added no less than $158 billion annually, or an average of $250 billion each year, since 2008.

Figure 3: Public versus Private Equity Capital Flows



Source: www.preqin.com; www.morningstar.com. March 2015.

Consequently, according to the latest Preqin data, financial sponsors had a record $1.24 trillion of uncalled capital, or dry powder, as of the end of March 2015. By comparison, dedicated U.S. micro-cap stocks – those in the Russell Microcap® Index – collectively have a total market cap of about $518 billion, made up of 1,625 companies with an equal weighted average market cap of approximately $320 million. Mutual funds, including both active and passive strategies, hold roughly 10.5% of the total holdings in the segment.

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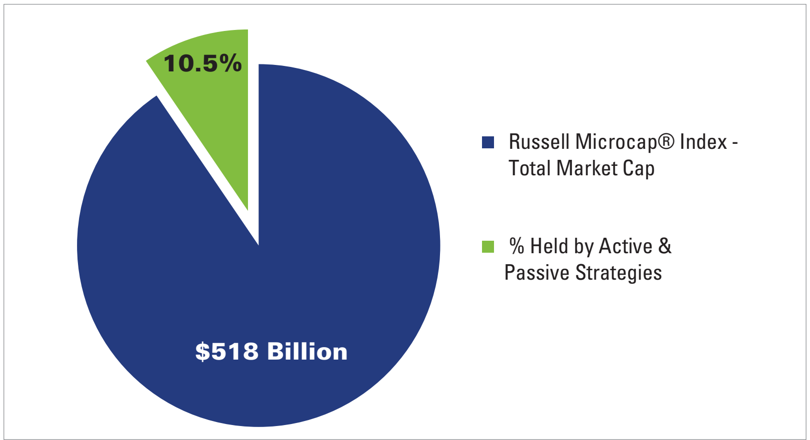
Figure 4: Micro-Caps Go Overlooked



Source: www.russell.com; www.acuitasinvestments.com; www.factset.com. March 2015.

Leverage

As has been well documented over the years, leverage remains a critical component to private equity's investment thesis. Sponsors ideally target companies with attractive free cash flows so they can pay down the debt over time. And many funds, in a liquid environment, will re-lever their portfolio companies through dividend recaps in order to return capital to shareholders without exiting the business.

While debt represents a key pillar in driving private equity returns, it also introduces new risk. The Federal Reserve and Office of the Comptroller of the Currency, in 2013, went so far as to set a suggested cap of 6x EBITDA for banking institutions providing loans for leveraged buyouts. Not coincidentally, entering 2015, average debt multiples rested at 5.9x EBITDA for larger LBOs and 5.1x for companies with EBITDA below $50 million, according to Standard & Poor's Capital IQ Leveraged Commentary and Data.

Conservatively, it's estimated that most PE-backed companies have a debt-to-equity ratio of two to one, whereas micro-cap companies, from 2010 to 2015, had an average debt-to-equity ratio of just under 1.1 to one.

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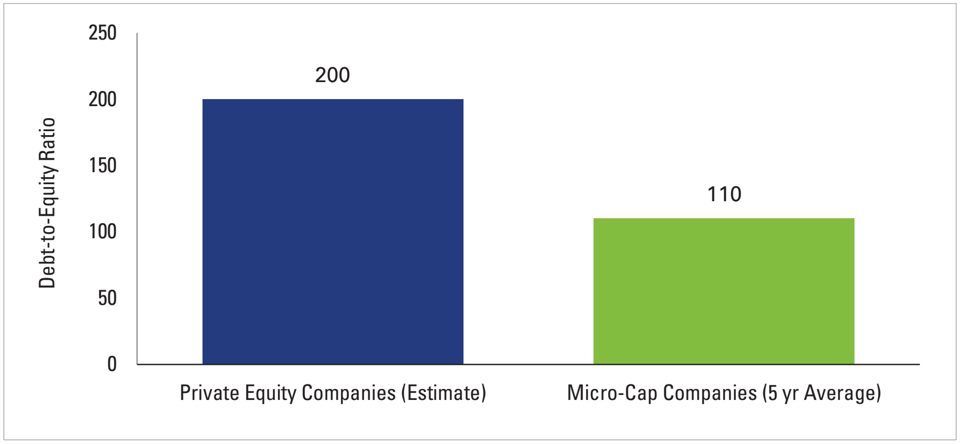
Figure 5: Debt-to-Equity Ratio: Micro-Cap versus Private Equity



Source: www.bloomberg.com. March 2015.

Private equity's reliance on debt, however, can leave assets more exposed in the face of economic turmoil. This was evident during the financial crisis of 2008, when nearly 50 PE-backed companies filed Chapter 11 and many more were forced to restructure their debt.

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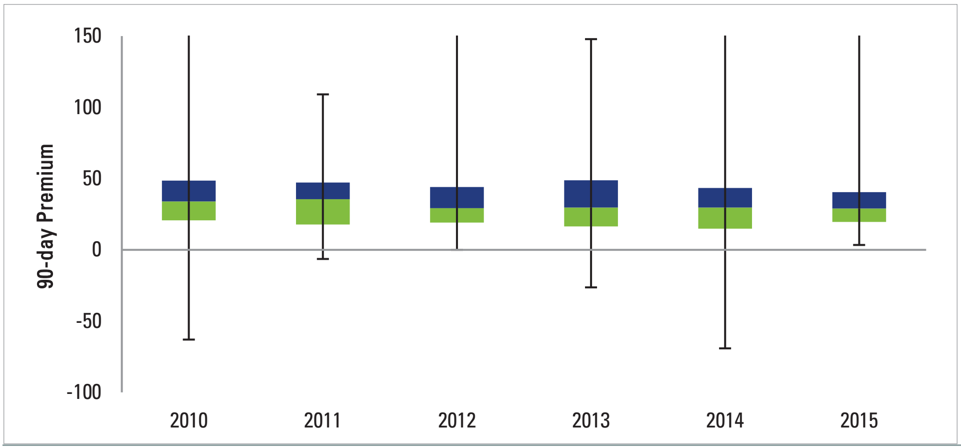
Valuations

The record amount of dry powder and robust debt markets have conspired to push valuations ever higher for leveraged buyouts, particularly as few deals today will escape an auction, which anecdotally can attract as many as 10 or more competitive bids. According to private equity-data provider PitchBook, purchase price multiples reached 10.7x EBITDA in 2014, exceeding levels seen at the peak of the last debt bubble in 2006, when purchase price multiples hit 9x EBITDA.

The variance between what sponsors are willing to pay and the entry prices for investors in public equities is perhaps best reflected by the average 90-day premiums. From 2010 onward, private equity-backed acquisitions involving targets in the Russell 2000® Index showed average premiums of no less than 33% annually compared to the average trading price during the 90 calendar-days ahead of the deal announcement.

Figure 6: 90-day Premiums Paid by Private Equity Firms for Russell 2000® Index Takeovers



Source: www.preqin.com. March 2015. Please refer to the back page of this booklet for other important information.

Private equity funds, while they stand to benefit through active ownership, have increasingly built their portfolios through competitive auctions, a factor that serves to escalate purchase prices, even in the less efficient micro-cap segment. This factor mitigates the value sponsors would otherwise capture in the micro-cap universe.

Volatility Opportunity

Micro-cap stocks have historically shown more volatility than other market-cap segments. Active, value-oriented fund managers, however, can benefit from an "information" advantage, and will often alleviate the volatility through extended holding periods of high quality assets. Moreover, as investors in value-oriented micro-cap funds well know, a certain amount of volatility has proven to be appealing, as it contributes to the low-degree of correlation with other public equities and presents more opportunities to find attractive entry prices.

Private equity investors, meanwhile, are drawn to the micro-cap segment as investments in smaller companies can often provide more room to grow and add value operationally. This factor, in turn, sets the stage for multiple arbitrage, another key pillar to the PE investment thesis. This is particularly true in an era of high valuations. While buyout investors may pay full prices at entry, through active ownership and rollup strategies, sponsors seek to expand purchase price multiples upon exit through growth.

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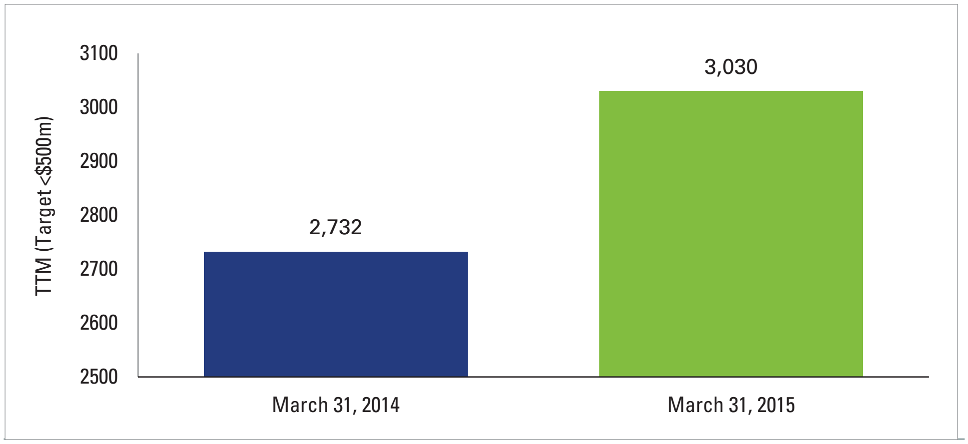
Micro-cap investors have benefitted greatly from both the PE interest in the segment and the ensuing consolidation activity, as M&A represents one of the more dependable catalysts for value creation. In the trailing 12 months ending March 31, 2015, FactSet documented 3,030 deals involving U.S. companies valued below $500 million, an increase of over 10% versus the year-ago period.

Figure 7: Trailing Twelve Months - Merger & Acquisitions



Source: www.factset.com. March 2015.

Fee Structure

While private equity has experienced a shift as it relates to fees and transparency, when compared to public equities, the asset class is still marked by the inflexibility of a 10-year lockup and the costly 2% and 20% fee structure (referring to a 2% management fee on total assets and a 20% carried interest cut on profits earned). Also, a significant portion of buyouts still contain transaction fees, which typically range from 2% to 3% of the total deal size, and monitoring fees, which can come in as high as 5% as a percentage of EBITDA, according to PitchBook. In addition, other fees and charges, such as legal costs, taxes and miscellaneous expenses, are often charged back to the funds, increasing the total cost to investors.

An April 2015 CEM Benchmarking study shined a light on the variance that exists between the reported management fees of PE investments and the actual direct costs to LPs once all other charges and expenses are accounted for. Using a $3 billion PE fund as an example, CEM Benchmarking estimated that the average difference between what funds actually report as fees and the estimated total cost to fund investors amounts to 202 basis points or $61 million, which also serves to underscore the obscure and discordant nature of PE fees.

Figure 8: Representative Private Equity Costs in a $3 B Portfolio

(CEM Universe, 2012—2013)

	Median Annual Cost based on net asset value (%)	Cost in $ Millions based on $3 B portfolio
Full Management Fees[1]	1.89	$56.7
Internal Monitoring Costs[1]	0.08	$2.4
Carry/Performance Fees[1]	1.49	$44.7
Other Fund-Level and Portfolio Company Fees[1]	0.36	$10.8
Estimated Total Direct LP Costs[2] (A)	3.82	$114.6
Reported Management Fees[3] (B)	1.80	$54.0
Difference (A-B)	**2.02**	**$60.6**

Source: www.cembenchmarking.com. March 2015.

[1] Data were provided by 29 Dutch funds in 2012 and 34 Dutch funds in 2013. Dutch private equity costs are representative of full costs since the Federation of Dutch Pension Funds developed full-cost disclosure guidelines effective 2012. Costs may be understated; not all funds have adapted to the new disclosure guidelines and an estimate is used for those funds.

[2] Total shown is the sum of the median cost for each cost type.

[3] Reported management fees are the fees provided by non-Dutch funds in the CEM universe for 2012 and 2013.

The fee structure of mutual funds is decidedly more cut and dried. And among mutual funds with 80% or more of their holdings comprised of micro-cap stocks, the average management fee came in at 1.07%, with an average net expense ratio of 1.53 percent.

Conclusion

All of this is not to say that the similar return profiles of micro-cap value equities and private equity should preclude investors from considering the role of LBO funds within their portfolios. Rather, the data suggest that for those who either can't access private equity (or access the top-quartile funds within the asset class), actively managed, value-oriented micro-cap investments can provide an attractive proxy investment strategy. The same would also hold true for investors with allocations to PE funds who may be seeking an appropriate destination for uncalled capital, one that offers the desired alpha of private equity with the liquidity needed to quickly move in and out of investments as demanded.

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Boston Partners is a premier provider of value equity investment products that are firmly rooted in fundamental research and are based on a disciplined investment philosophy and process. Boston Partners, which currently manages $74.5 billion, is focused on investing in companies with attractive value characteristics and strong business fundamentals, where there is a catalyst for positive change. The firm, founded in 1995, has a longstanding reputation for superior client service. Boston Partners is part of Netherlands-based Robeco, one of the largest European asset management firms. The WPG Small/Micro Cap Value Fund was formerly part of Weiss, Peck & Greer, which managed assets since 1970 and was acquired in 1998 by Robeco. In 2007 it was merged into Robeco's U.S. operations, and in 2014 it became part of Boston Partners' strategies.

** As of March 31, 2015.*

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