INSIGHT FROM POLEN CAPITAL

# Not All Is What It Seems in Small Cap

## Executive Summary


The recent launch of the Polen U.S. Small Company Growth portfolio has afforded us the opportunity to explore recent trends that are unfolding among smaller capitalization businesses. We find that a disproportionately large number of companies in the smaller cap space are currently unprofitable, a development we find odd at this point in the economic cycle. We believe the reasons behind these trends are varied but that contributing factors include higher overall debt levels as well as interest costs and much heavier investment spend by some companies. The high level of unprofitable businesses appears to have implications for valuations as well as investment returns, as we believe the longer-term correlation between profitability and total return is quite clear.



**May 2018**



**Stephen Atkins, CFA**
*Portfolio Strategist & Analyst — Large Company Growth*

**Rayna Lesser Hannaway, CFA**
*Portfolio Manager & Analyst — Small Company Growth*


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## (Un)profitability Trends

2017 was another busy year at Polen Capital as we successfully launched an International equity fund led by Todd Morris, and a U.S. Small Company equity fund led by our Small Company Growth Team colleagues, Tucker Walsh and Rayna Lesser Hannaway. We are excited for the opportunity to provide investors with high-quality, differentiated investment strategies. In our discussions with Tucker and Rayna about current trends within the smaller cap equity space, they both pointed out one particularly unusual observation: the number of unprofitable companies within their universe seemed oddly high relative to history, especially at this point in the economic cycle. In our constant search for understanding, we conducted a deeper analysis of this issue, working in conjunction with our Small Company Growth Team, which revealed some interesting findings.

Currently, Tucker and Rayna generate their small company universe by screening for companies in a market cap range of $500mm to $4bn (referred to as the "Polen SCU," representing the full universe of publicly-traded companies in that small cap range). From this starting point, we isolated the companies that were unprofitable on a GAAP basis for the most recent fiscal year and then compared the number of these companies to the broader Polen SCU. We then pulled this same data at five-year intervals, going back to 1993. To account for price appreciation that could affect the market cap parameters of that universe over time, we reduced the historical universe range in line with the actual performance of the Russell 2000 Index.[1] The results are shown in Figure 1.

1 For example, between 2012 and 2017 the Russell 2000 Index appreciated by 77%, thus the market cap parameters were adjusted by this same percentage.

**Figure 1: Percentage of Unprofitable Holdings in the Polen SCU**[2]

| Market cap ($bn) | 30-Jun-17 | 30-Jun-12 | 30-Jun-07 | 30-Jun-02 | 30-Jun-97 | 30-Jun-93[3] |
|---|---|---|---|---|---|---|
| Market Cap - Upper Bound | 4.0 | 2.3 | 2.4 | 1.3 | 1.1 | 0.7 |
| Market Cap - Lower Bound | 0.5 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 |
| By Number of Holdings | 27% | 20% | 19% | 34% | 17% | 20% |
| By Total Weight of Holdings[4] | 23% | 15% | 16% | 30% | 14% | 17% |
| | n = 1,438 | n = 1,464 | n = 1,781 | n = 1,681 | n = 1,996 | n = 1,409 |

Source: Polen Capital, Bloomberg

As illustrated by this data, the percentage of unprofitable companies in this universe appears to be at its highest level since 2002. What's troubling to us about this development, however, is that 2002 was only a year removed from the 2001 U.S. recessionary period, when higher levels of unprofitable smaller companies would have been reasonable given the continued fallout from the tech/telecom bubble. Today, we stand nearly ten years removed from the most recent domestic recession at a time when one might expect most companies to be enjoying high levels of profitability. Further, the percentage of unprofitable companies is above the levels seen in other one-year periods that preceded recessions, namely 2007 and 1997.

## Small Company Valuations

The higher level of unprofitable businesses seen currently also appears to be skewing valuations in the widely followed Russell 2000 Small Cap Index and its growth and value subsets. A recent analysis in Barron's indicates that roughly one-third of the companies in the Russell 2000 Small Cap Index are currently unprofitable.[5] According to Barron's, the trailing P/E of that Index (as of year-end 2017) jumps from 29x to 56x when one includes the loss-making businesses. Unsurprisingly, we see a similar dynamic in the Russell 2000 Growth universe, the Polen U.S. Small Company Growth strategy's benchmark. As of February 28, 2018, the trailing P/E of the Russell 2000 Growth as published on FTSE Russell's website is 25.98, ex-negative earnings. Using a weighted harmonic mean methodology, which includes non-earning businesses, this P/E leaps to 46x. Ultimately, this has implications for active managers who may, at first blush, appear expensive on a valuation basis relative to the index. In the case of our Polen U.S. Small Company Growth strategy, 31x compares much more favorably to the Russell 2000 Growth Index's all-inclusive P/E of 46x, using the same methodology.[6]

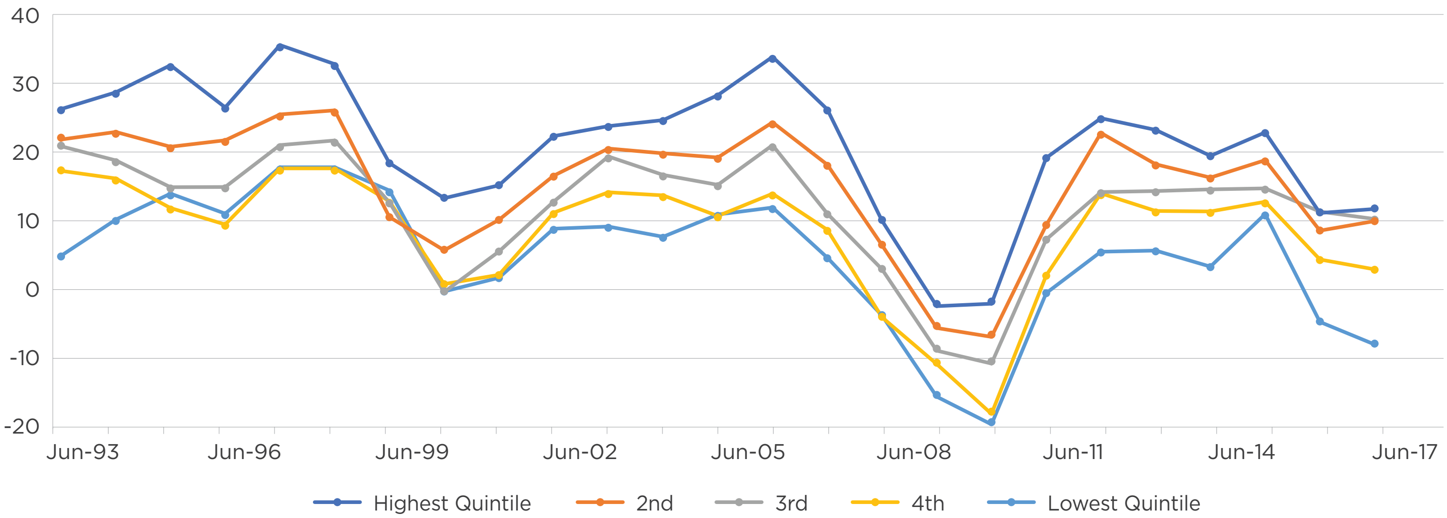
## Why Profitability Matters

We have heard the argument espoused that absolute levels of profitability are less relevant in the small company space as many of these companies are less mature, rapidly growing businesses that need to invest ahead of their growth. While this argument may sound good in theory (and may be true over shorter time periods), in our opinion historical data is fairly conclusive that profitability matters over the longer term. The chart in Figure 2 shows the Polen SCU separated by ROIC quintiles, along with the subsequent rolling three-year returns of those quintiles going back to the early 1990s. As illustrated by this data, the highest ROIC quintile of companies has demonstrably outperformed the others. Even more notable, in

2 Profitability based on GAAP net income as of most recent fiscal year for each five-year interval.
3 Reliable data available only back to 1993
4 Holdings weight based on market cap of each company relative to aggregate market cap of defined universe.
5 Arends, Brett. "Unseen Dangers in Small-Cap Stock Rally." Barron's 20 Jan. 2018
6 We are proponents of using weighted harmonic mean for certain data sets. Please see the attached link for more on this subject: http://economicdata.blogspot.com/2017/07/the-case-for-harmonic-mean-pe.html

our view, is the spread in performance between the highest ROIC quintile and the lowest ROIC quintile (see Figure 3). We believe this historical data plays very much to our strengths as an investment manager that strictly focuses on high-quality, high-ROIC businesses.[7]

**Figure 2: Polen SCU: Rolling 3-yr. Median Total Returns of ROIC Quintiles[8]**




Source: Polen Capital, Bloomberg

**Figure 3: Polen SCU: ROIC Quintile Returns**

| ROIC Quintile | Med Total Return Across All 3-year Rolling Periods | Spread vs. Highest Quintile |
|---|---|---|
| Highest | 23.12% | - |
| 2nd | 18.05% | -5.07% |
| 3rd | 14.15% | -8.97% |
| 4th | 11.15% | -11.97% |
| Lowest | 5.55% | -17.57% |

Source: Polen Capital, Bloomberg

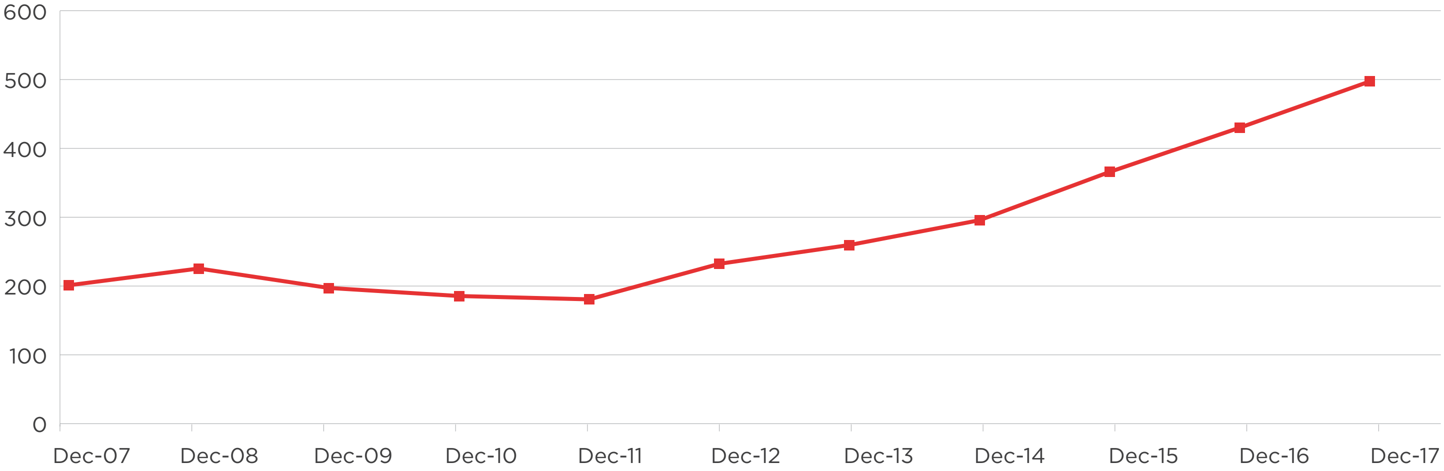
## What Has Led Us to This Point?

In one of our previous whitepapers, we explored the deterioration of credit quality among large capitalization companies during the past decade.[9] The explosion in debt among U.S. corporations since the financial crisis is well-documented and we have seen this trend play out among small capitalization companies as well. The chart in Figure 4 shows the change in Net Debt within the Russell 2000 Index (ex-financials), which indicates overall net debt levels have more than doubled over the past ten years.

While it may be true that lower interest rates have made servicing debt easier, we would also note that, despite these lower rates, total interest expense relative to EBITDA has also steadily risen over the past ten years (see Figure 5). Thus, it appears that the current high levels of unprofitable businesses in the Polen SCU can, in our view, at least partially be explained by higher debt and interest costs.

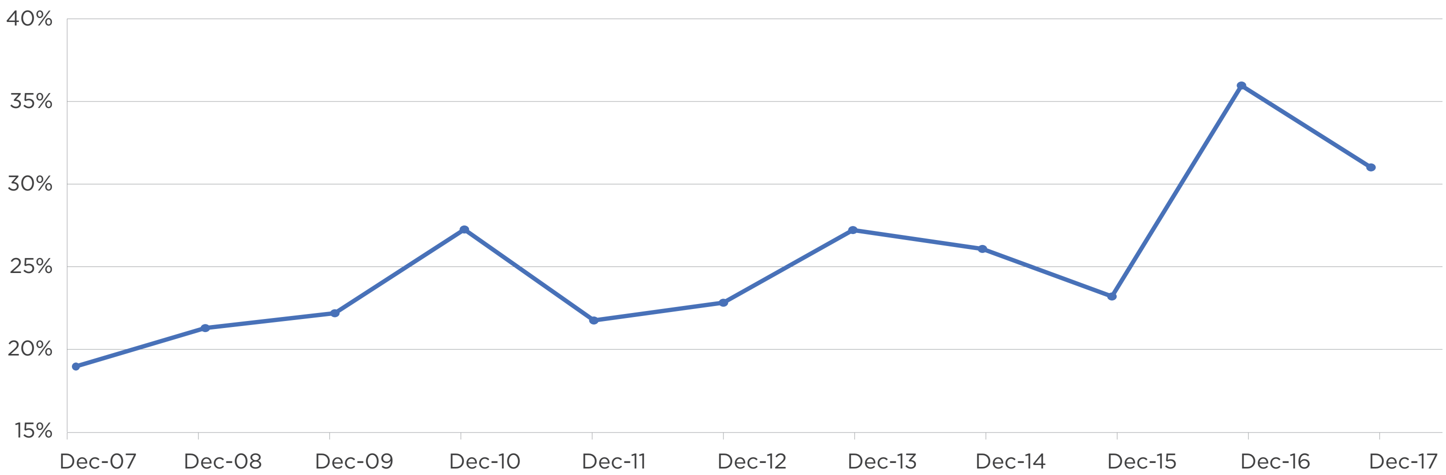
7 We acknowledge that changes to GAAP accounting policies over the time-period studied can make comparisons a bit difficult. However, it is not clear that the changes to GAAP accounting over the past 25 years have made companies appear less profitable today than they were based on old accounting standards as some changes to GAAP have had the impact of increasing current period earnings and other changes have had the opposite effect.
8 ROIC for each company based on GAAP net income for most recent fiscal year for the relevant time period.
9 Credit Quality and Valuation Trends of the S&P 500

Figure 4: Russell 2000 Index (ex-financials): Total Net Debt ($bn)




Source: Polen Capital, Bloomberg

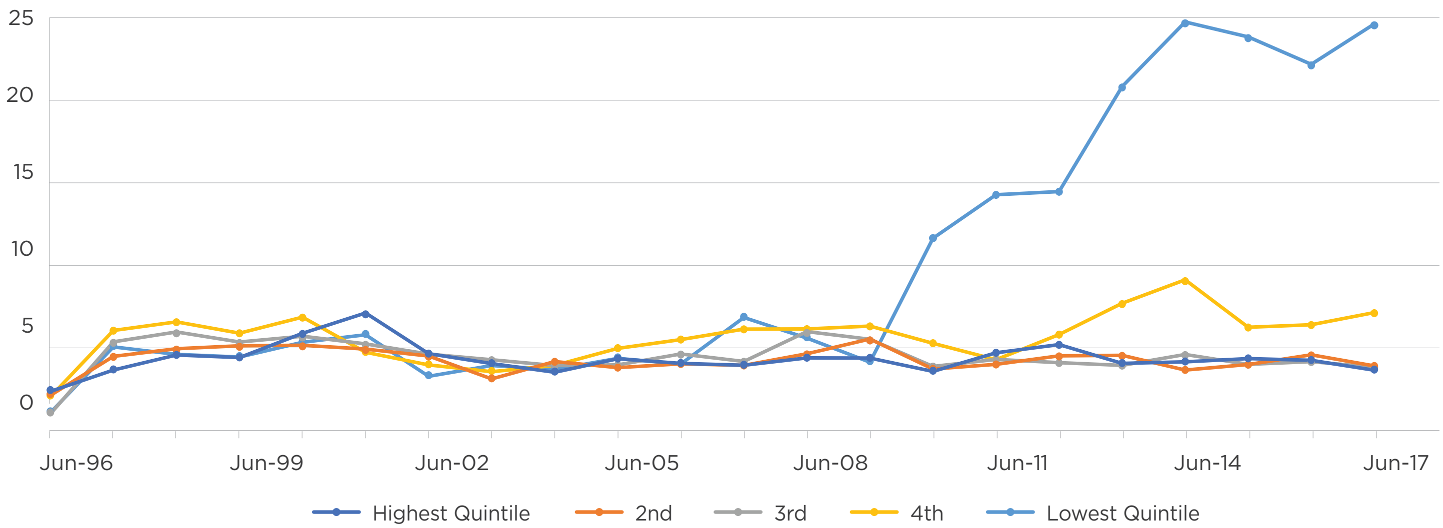
Figure 5: Russell 2000 Index (ex-financials): Total Interest Expense/Total EBITDA




Source: Polen Capital, Bloomberg

There are other factors at play that we believe have led to the higher absolute level of current unprofitable small companies. For example, easy access to capital seems to have allowed companies to stay private much longer during this business cycle compared to previous ones. Without the scrutiny of public shareholders, privately held companies have been free (and likely encouraged by their investors) to invest heavily in order to rapidly expand their businesses. Their public counterparts have undoubtedly felt the pressure to keep pace with well-funded private competitors, which may be straining profitability for many of these public, small capitalization companies. In some cases, a company with a proven business model chooses to reinvest a large portion of its revenues and cash flow back into the business to drive growth and land customers with high lifetime value before competitors do. In support of this dynamic, Figure 6 shows reinvestment trends for the Polen SCU. Note that, for the least profitable ROIC quintile, there has been a pronounced increase in investment relative to sales over the past few years (recently IPO'd biotechs appear to be among the worst perpetrators), illustrating yet another factor that we believe may explain the current high number of unprofitable businesses in the universe.

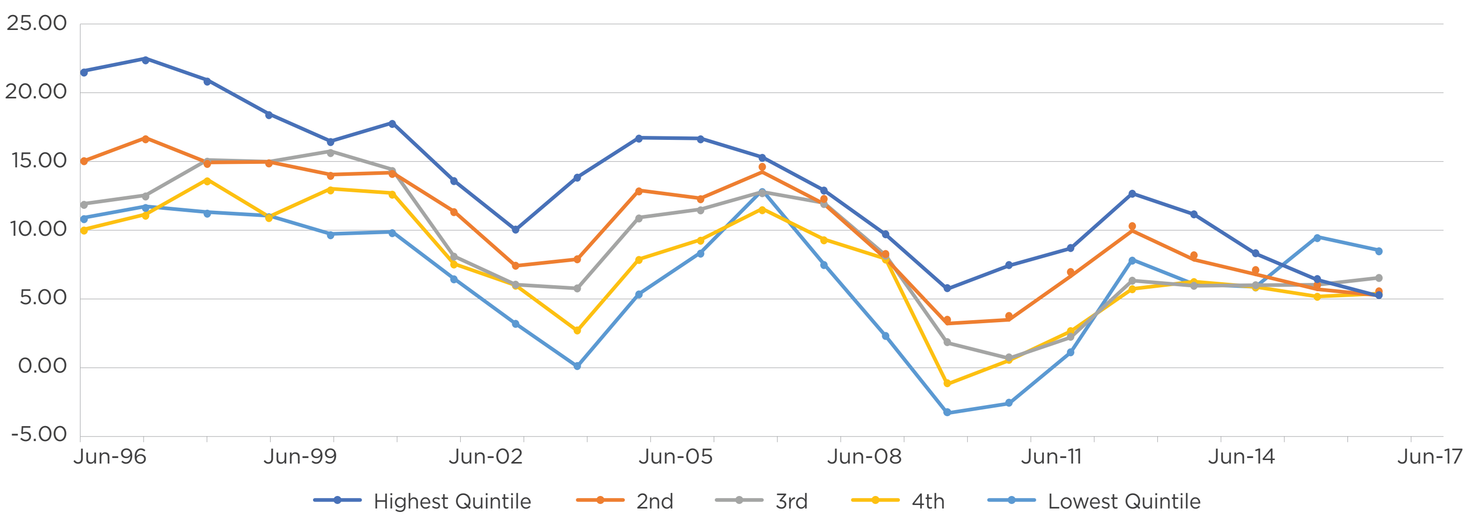
### Figure 6: Polen SCU: Reinvestment Spend Ratio for each ROIC Quintile[10]




Source: Polen Capital, Bloomberg

We believe purposeful reinvestment, which may strategically drive revenue growth over earnings and cash flow growth in the near term, can be very successful for a proven business with attractive customer economics (see Figure 7; note that the 3-year revenue growth of the least profitable quintile has exceeded the revenue growth of the most profitable quintile for the first time in the series). However, in smaller cap, we believe it is more often the case that an unprofitable company shows incredible promise but lacks revenues and cash flow. In these cases, we interpret reinvestment in the business as more "hopeful," being built on growth models rather than actual growth. This type of company carries a much higher level of risk and requires managers to make aggressive assumptions that are often unachievable. Also, companies like this tend to be more reliant on the capital markets to continue funding their businesses, and we believe there is a high risk of failure if their cash flow doesn't scale and funding dries up.

### Figure 7: Polen SCU: 3-yr Revenue Growth CAGR for each ROIC Quintile




Source: Polen Capital, Bloomberg

10 Calculated as (Cap-ex + R&D costs)/Revenues where available for each company. The median ratio for each quintile on an annual basis was utilized in order to reduce the effects of outliers.

We worry that some investment managers and their investors are willing to look past this lack of profitability despite many of the great business lessons we learned from the dot-com crash and the 2008 financial crisis. To be sure, we are big believers in innovation, but we have learned how important it is to have a monetizable product or service, a working business model that is self-funding, smart capital allocation, and reinvestment opportunities that maximize value in the future. We are also concerned that many of the companies in the Polen SCU that are already unprofitable and with high levels of variable-rate debt seem at risk for an even larger profit burden if interest rates rise and/or a recession causes revenue growth to slump. In order to bring this argument full circle, we believe it is imperative to point out that our investment approach is *specifically designed to avoid these types of risks*. To that end, we would note that, as of December 31, 2017, the Polen U.S. Small Company Growth portfolio had a trailing twelve-month ROIC of 18% and a median Net Debt/Cap ratio of -14%.

## Conclusion

The current number of unprofitable businesses in the U.S. small capitalization space is at elevated levels relative to history, particularly at this point in the economic cycle. The odd bolus of these non-earning businesses appears to be distorting valuations within the Russell 2000 Small Cap Index, as this index typically excludes such companies and may potentially create unfair comparisons to active managers. We believe that much higher debt levels and associated interest costs, as well as the increased number of companies remaining private, are among the reasons behind this trend of unprofitability which may be forcing public companies to spend more heavily to stay competitive, even when their business models are unproven.

While investors may be accepting of these profitability and potential liquidity issues in the near-term, in our view, history demonstrates that profitability matters over the long term. We believe those higher ROIC businesses will be appropriately weighed by the market. Polen Capital maintains a long-term investment approach that focuses on the highest-quality companies with strong balance sheets, above-average growth and profitability and what we believe are enduring competitive advantages. We believe that an important source of competitive advantage is having financial discipline; a balanced approach to growth and profitability gives a company the financial flexibility and control to gain a competitive edge in any liquidity or stock market scenario, without reliance on the capital markets. We believe those companies that rely on debt instead of internal cash flow to fund growth are much more susceptible to losing market share and having going concern risk in difficult market or liquidity environments.

## About The Authors

Stephen Atkins, CFA, Portfolio Strategist & Analyst — Large Company Growth, joined Polen Capital in 2012 after a 12-year tenure as a portfolio manager at Northern Trust investments—including eight years as a mutual fund co-portfolio manager. Mr. Atkins also spent two years at Carl Domino Associates, LP. He received his B.S. in Business Administration from Georgetown University and a General Course degree from the London School of Economics. Mr. Atkins is a CFA Charterholder and a member of the CFA Institute and CFA Society of South Florida.

Rayna Lesser Hannaway, CFA, Portfolio Manager & Analyst – Small Company Growth, joined Polen Capital in 2017 after nine years in portfolio management and two years as a research analyst at Fidelity Investments in Boston evaluating small and mid-cap companies. She also spent nine years working in small cap research for Jennison Associates and Lord Abbett & Company. Ms. Lesser Hannaway received a B.A. in Economics from Barnard College, a division of Columbia University, where she graduated summa cum laude in 1996. Ms. Lesser Hannaway is a CFA charterholder since 2000.

## About Polen Capital

Founded in 1979, Polen Capital is a global investment management firm that provides high value-added quality growth investment strategies to sophisticated clients around the world. The Firm is committed to attracting experienced, disciplined investment professionals to add value to client portfolios. Polen Capital's Large Company Growth Team oversees a global equities universe of high-quality growth companies and manages the flagship Focus Growth strategy, as well as the Global Growth and International Growth investment strategies. The Firm also has an autonomous Small Company Growth Team that manages a U.S. Small Company Growth strategy. Polen Capital's strategies are offered through various investment vehicles to accommodate a broad range of client mandates. For more information visit **www.polencapital.com** and connect with us on **LinkedIn.**

Marketing Team | 1825 NW Corporate Blvd. Suite 300, Boca Raton, FL 33431

+ 1-800-358-1887 | marketing@polencapital.com | www.polencapital.com

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