How Do Microcap and Small Cap Perform When Yields Are Rising?

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Introduction

According to the National Association of State Retirement Administrators (NASRA) Public Fund Survey, over half of the plans in the survey have reduced their assumed rate of investment returns since 2008. Partially in response to this declining long-term outlook for returns, investors have sought ways to boost investment results. As a result, active allocations down the cap spectrum have gained more attention. As a specialist in allocating to microcap and small cap investment managers, Acuitas seeks to understand the forces driving these asset classes and highlight the historical performance of microcap and small cap stocks in low- and early-stage rising interest rate environments.

Many investors broadly accept the long-term return premium associated with microcap and small cap but fail to recognize that higher-than-average relative returns have been generated during times of rising interest rates, both in the US and abroad. Since 2008, public companies have benefitted from an environment of low interest rates driven by monetary policy targeted at stimulating economic growth. Some of the greatest absolute returns have been generated during times of declining interest rates, which most accurately describes the investor experience over the past six calendar years. Given the duration of looser monetary policy and favorable investor returns, the underlying fear is that investors have been lulled into anchoring upon recent market experience.

Before the dramatic drop in emerging markets and pullback in US stocks, US Treasury yields reflected a healthier economy and the Federal Reserve was making waves by signaling that it may be the first major monetary institution to begin raising rates. The view until recently was that this would happen by the end of September although consensus is that the timing may be delayed until later in the year. Globally, rates remain very low and the IMF has stated that turmoil in financial markets and slowing growth in China could keep global rates low for some time. But what happens when rates finally rise? Is the party over for small and microcap stocks? Our research has highlighted an interesting relationship between rising rates and small cap leadership that gives us confidence in any strategic allocation.

US Equity

The historical relative performance of microcap and small cap versus their larger counterparts has been surprisingly positive during rising interest rate environments. Using Fama-French data from 1963 thru 2014, Acuitas identified ten distinct periods where the yield on the 10-Year US Treasury was rising. In six of the ten periods, microcap outperformed small cap. In seven of the ten periods, small cap outperformed large cap. Additionally, we found that returns during these periods were even more favorable than the long-term return premium associated with investing in microcap and small cap relative to large cap. For example, the average annual return premium in periods of rising rates for microcap over small cap was 4.13% (see disclosures for return calculation methodology) while the annualized relative return over the entire period was 2.24%. The average annual return premium for small cap over large cap during the ten periods of rising rates was 7.60% while the annualized relative return of small cap over large cap from 1963 to 2014 was 2.55%.

While returns generally favored smaller stocks over the period under review, they were less favorable for small and microcap during the periods after September 1981 due to the persistent long-term trend of declining interest rates. While there were short periods of rising rates after September 30, 1981, the long-term trend in rates was lower. From September 30, 1981 thru 2014, yields declined from roughly 15% to 2% and microcap underperformed small cap, but only by 0.27% on an annualized basis. Conversely, the relative performance of small and microcap was distinctly positive during the period from 1963 to September 30, 1981, where yields rose from roughly 4% to 15%. During that time period, microcap outperformed small cap by 2.91% and US small cap outperformed US large cap by 5.02%, on an annualized basis.

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We believe that one factor that drove the muted performance of small cap and microcap versus their large cap counterparts during periods of declining rates in the post September 30, 1981 is the degree to which larger companies benefit from utilizing higher levels of leverage. To illustrate some key differences in the use of leverage and the impact on large stocks versus small and microcap stocks, listed below is a side by side comparison of the characteristics of the large cap, small cap, and microcap indices. As the reader can see below, larger companies generally use leverage. Small and microcap companies, with smaller and often less diversified businesses, do not possess the same ability to borrow money in the credit markets. In addition, smaller companies retain greater future flexibility by retaining low levels of debt. As a result of these lower levels of debt, small companies do not benefit to the same degree from a reduction in borrowing costs.

Table 1. Recent Characteristics of US Indexes

Characteristic	Russell 1000	Russell 2000	Russell Microcap
Valuation			
Dividend Yield	1.89	1.30	1.23
Price/Book	2.61	2.09	1.62
P/E using FY1 Est	17.9	18.5	17.4
Growth & Momentum			
Hist 3Yr Sales Growth	8.4	16.4	19.4
Est 3-5 Yr EPS Growth	11.8	14.9	15.2
Quality			
ROE	18.8	6.6	-1.1
ROA	8.1	1.5	-4.3
Operating Margin	20.4	12.5	8.7
Net Margin	13.3	7.5	4.2
LT Debt to Capital	38.3	31.5	17.4
EPS Variability	0.21	0.52	0.85

Source: Acuitas Investments, FactSet, Russell Investments. Data as of 07/31/2015.

As we review the relative characteristics of stocks and historical performance during prior periods in context of interest rate environments, we recognize that in today's environment of low interest rates, investors going forward may face a prolonged period of rising rates similar to the period from 1963 to September 30, 1981.

Table 2. Relative Performance of US Microcap and Small Cap During Times of Rising Rates

	Relative Performance	
Rising Rate Time Period	**Micro - Small**	**Small - Large**
12/31/1962 to 2/28/1966	4.84%	8.05%
3/31/1967 to 12/31/1969	7.83%	6.74%
3/31/1971 to 9/30/1975	-1.77%	-5.08%
12/31/1976 to 2/29/1980	10.24%	17.58%
6/30/1980 to 9/30/1981	-0.46%	10.69%
4/29/1983 to 6/29/1984	1.44%	-3.76%
8/29/1986 to 9/30/1987	-1.24%	-6.02%
9/30/1993 to 10/31/1994	-0.43%	2.69%
9/30/1998 to 12/31/1999	2.60%	2.95%
5/31/2003 to 4/30/2006	4.35%	7.42%

Source: Acuitas Investments, Fama French Data Library. Microcap, small cap, and large cap returns represent a weighted composite of Fama-French capitalization deciles.

Non-US Equity

We see a similar pattern of performance in the Fama-French data for non-US markets which dates back to July of 1990. For the purpose of this analysis, we utilized small and microcap as one portfolio because the institutional marketplace has yet to broadly accept microcap outside of the United States as a distinct asset allocation option. Similar to our analysis in the US, we analyzed performance of two allocations, micro/small and large cap, during six periods where the

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10-year bond yield in three major developed economies (Japan, UK and Germany) were generally rising.

As can be seen below, the relative performance results of a micro/small cap portfolio during periods of rising rates are similarly strong versus large cap in non-US markets as they were in the U.S. The micro/small Cap portfolio outperformed large cap in four of six periods and the average excess return was 5.58%. Additionally, the average relative return of the micro/small cap portfolio is greater than the annualized relative return of the portfolio versus large cap for the entire period under review (July 1990 – December 2014). What this data does not capture is a prolonged period of rising rates, as was present in the US data prior to 1981. Given the current interest rate environment and likelihood of an eventual rise in rates, the case for microcap and small cap in non-US is especially interesting.

Table 3. Relative Performance of Non-US Microcap and Small Cap During Periods of Rising Rates

	Relative Performance
Rising Rate Time Period	**Micro/Small - Large**
12/31/1993 to 2/28/1995	0.27%
1/31/1999 to 8/31/2000	16.13%
5/31/2003 to 6/30/2004	22.02%
5/28/2005 to 6/30/2007	-2.79%
9/30/2010 to 3/31/2011	1.03%
6/30/2012 to 12/31/2013	-3.21%

Source: Acuitas Investments, Fama French Data Library. Small cap and large cap returns represent a weighted composite of Fama-French capitalization deciles.

With a similar trend in performance during rising interest rate environments, it is not a surprise to see similarities in the comparison of fundamental characteristics. Non-US small cap companies have higher growth rates and less debt than their large cap counterparts.

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Table 4. Recent Characteristics of Non-US Indexes

Characteristic	Russell Large Cap Global ex US	Russell Small Cap Global ex US
Valuation		
Dividend Yield	2.73	2.21
Price/Book	1.72	1.43
P/E using FY1 Est	15.36	15.84
Growth & Momentum		
Hist 3Yr Sales Growth	7.7	12.8
Est 3-5 Yr EPS Growth	11.3	15.8
Quality		
ROE	14.9	10.8
ROA	6.3	5.7
Operating Margin	17.0	13.7
Net Margin	12.2	10.8
LT Debt to Capital	31.1	25.4
EPS Variability	0.2	0.2

Source: Acuitas Investments, FactSet, Russell Investments. Data as of 08/04/2015.

Table 5. Summary of Relative Performance of Small Cap Premiums

	Relative Performance	
Market Premium	Long Term Average (All Periods)	Average During Periods of Rising Rates
US Microcap – US Small Cap	2.55%	4.13%
US Small Cap – US Large Cap	2.24%	7.60%
Non-US Micro/Small – Non-US Large Cap	0.63%	5.58%

*Source: Acuitas Investments, Fama French Data Library. Small cap and large cap returns represent a weighted composite of Fama-French capitalization deciles. US equity returns represent the time period 06/30/1926 to 12/31/2014. Non-US equity returns represent the time period 06/30/1990 to 12/31/2014.

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Summary

A review of performance in both the US and non-US markets demonstrates that periods of increasing interest rates have on average resulted in higher returns for microcap and small cap versus large cap. Furthermore, the relative returns generated during these periods were greater than the long-term relative return premium associated with investing in small and microcap. One important factor influencing these returns is the lower levels of debt. Rising rates often occur during periods of economic growth where some of the greatest opportunities to leverage the improving economy is through smaller stocks. Larger stocks with higher levels of debt and lower growth rates have not historically kept pace. Another factor is the benefit of investing in small, higher growth companies with leverage to an improving economy, which is often the case during periods of rising interest rates. Despite the market volatility in the third quarter of 2015 that we have seen, global rates remain low and the potential for yields to trend higher over time seems certain. While we are unsure about the timing of higher yields, we remain confident in the prospects for small and microcap stocks globally in a rising rate environment.

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Disclosures

Microcap, small cap, and large cap returns based on the Fama French Data Library represent a weighted composite of Fama-French capitalization deciles.

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