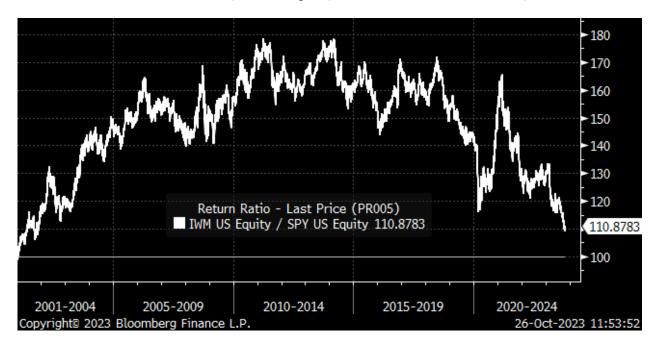
## VALUE CREATION THROUGH CONSTRUCTIVE ACTIVISM

#### A PICTURE IS WORTH 1000 WORDS

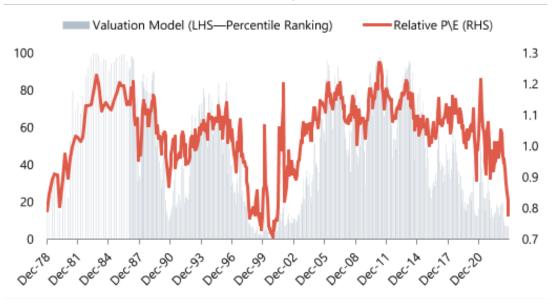
We have written a number of pieces over the last 18 months arguing that the small and microcap markets are incredibly undervalued. This time we decided to simply provide a series of charts and data that highlight just how undervalued we believe it is and, therefore, how much upside we believe there actually is for companies within these markets. We think this is one of the better buying opportunities for the small cap and microcap markets. And so with that as a very brief introduction, we will simply let these pictures tell the story with minimal discussion of each one.

## The ratio of US small caps to US large caps is at the lowest level since early 2001



Anything that trades at 25-year lows is an event. We believe today's IWM/SPY ratio says nothing about the fundamentals of the businesses that comprise each index given those fundamentals have held up better for many microcap companies than the index performance would suggest.

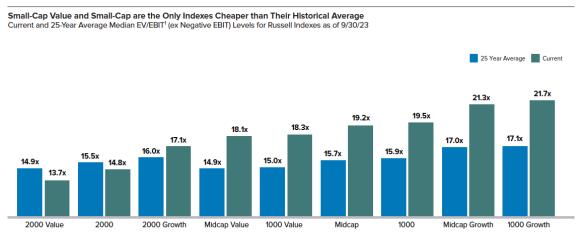
# Relative valuation model and relative P/E are back to '02 levels



Source: FactSet; FTSE Russell; Jefferies

If you didn't think going back only 23 years as we did with the prior chart was sufficient, lets analyze the last 45 years to 1978 when Jimmy Carter was president and inflation was the same issue that it is today. That happens to be "the other time" the Russell 2000 Index was as cheap on a relative P/E ratio as it is today.

Are we at the end of the Fed rate-hike cycle? The answer to that question is likely dependent on the answer to the question: Has inflation peaked? The Consumer Price Index has gone from 9.1% to 3.7%. To a great extent, we believe that decline will have a defining impact on what the Fed does from here.



<sup>1</sup> Enterprise Value/Earnings Before Interest and Taxes

Source: Royce Investment Partners US Small-Cap Market Overview, September 30, 2023.

As seen in Royce Investment Partners' most recent quarterly piece, Small-Cap Value and Small-Cap Core are the cheapest segments of U.S. equities on a relative basis. While it's understandable that multiples would contract in a rising rate environment it is only small cap value and small cap core that are below their 25-year average valuations. Every other index in the chart above trades at premiums to their 25-year average multiple.

Exhibit 9: Small caps trade at a historical discount vs large on all metrics we track

Relative valuations for the Russell 2000 vs the Russell 1000 (1/31/1985-9/30/2023)

					% D	iffere	nce
	Rel	ative \	/aluat	ion		From	
				Long			Long
				-			-
	As of			Term			Term
	Sep-			Aver			Aver
Valuation Metric	23	Max	Min	age	Max	Min	age
Trailing P/E	0.59	1.27	0.54	1.00	-53%	9%	-41%
Forward P/E	0.72	1.30	0.59	1.00	-44%	21%	-28%
Price/Book	0.46	1.11	0.45	0.76	-59%	1%	-39%
Price/Sales	0.52	1.02	0.43	0.74	-49%	20%	-30%
P/E To Growth	0.56	1.07	0.49	0.77	-47%	16%	-27%
Enterprise Value to FCF	0.61	1.22	0.56	0.84	-50%	8%	-28%

Note: P/E measures exclude negative earnings. Forward P/E is on I/B/E/S consensus N12m forecast earnings. EV/FCF excludes negative FCF.

Source: BofA US Equity & Quant Strategy, FactSet

BofA GLOBAL RESEARCH

No matter what valuation measure one looks at, small caps are trading at a historic discount versus large caps, and these data are not saying small caps are only slightly cheap. The relative valuation gap between small caps and large caps from a 28% discount on enterprise value to FCF to a 41% discount on trailing P/E is neither normal nor, we believe, justified.



Source: <a href="https://finviz.com/map.ashx?t=sec&st=ytd">https://finviz.com/map.ashx?t=sec&st=ytd</a>. Data as of November 10, 2023.

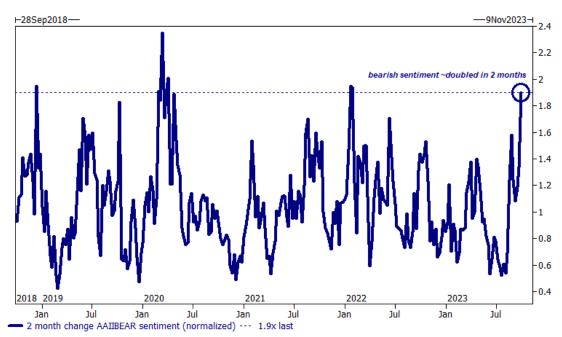
This heat map chart tells the story of where investors have captured their performance in 2023. If you owned MSFT, AAPL, NVDA, GOOG, AMZN, META, and TSLA, then congratulations you've had a great year. If you owned the massive majority of the rest of the S&P 500, you get a lump of coal in your stocking come the holidays. This level of performance of the largest and "safest" of names usually coincides with the bottom of an economy where scarcity of earnings growth abounds and is historically the bottom for stocks with far lower market capitalizations.

	Q3 2023	QTD	YTD	1 Year	3 Year	5 Year	10 Year	From Peak on 11/9/21
NASDAQ 100	-2.9%	5.6%	43.0%	30.1%	29.6%	133.3%	392.8%	-2.6%
NASDAQ COMPOSITE	-3.9%	4.4%	32.8%	21.3%	15.8%	96.8%	277.8%	-11.7%
S&P 500 INDEX	-3.3%	3.1%	16.6%	9.9%	27.5%	73.9%	194.5%	-2.7%
RUSSELL 2000 INDEX	-5.1%	-4.4%	-2.0%	-8.3%	-2.7%	18.7%	70.4%	-27.7%
S&P 500 Growth	-2.6%	3.3%	22.1%	12.8%	18.4%	81.9%	237.4%	-12.1%
S&P 500 Value	-4.1%	2.9%	10.6%	6.3%	35.4%	58.4%	140.1%	6.7%
RUSSELL MICROCAP	-7.9%	-5.6%	-11.1%	-14.9%	-10.9%	7.7%	45.8%	-37.5%
RUSSELL MICROCAP VALUE	-5.6%	-4.7%	-10.6%	-14.5%	11.1%	19.2%	68.7%	-28.5%
RUSSELL MICROCAP GROWTH	-12.1%	-6.5%	-13.4%	-17.0%	-35.1%	-9.2%	14.7%	-48.5%

Source: Bloomberg. To date data in last column as of November 10, 2023.

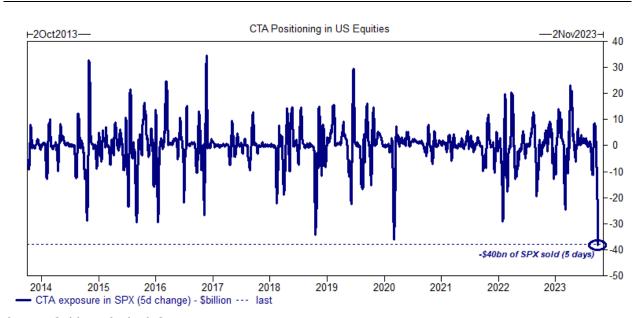
At least in 2008 when the economy actually melted down, most indices were down about the same amount. Back in 2008, the S&P 500 Index was -37%, the Nasdaq Composite Index was -40%, the Russell 2000 Index was -34% and the Russell Microcap Index was -40%. How is it that year-to-date the NASDAQ 100 can be +43% when the Russell Microcap Index is -11%? How can the S&P 500 be -2.7% from its high in November 2021, when the Russell Microcap Index is -37.5% and the Russell Microcap Growth Index is -48.5%?

While we understand the bearish effect of today's world of higher interest rates, it has had a significantly greater effect on small caps relative to the 2008 economic environment where nearly \$1 trillion of losses occurred from categories of loans and related securities issued in the United States secured primarily by residential real estate. 2008 was "an economic Pearl Harbor" as Warren Buffett said. 2023 is not the same economic calamity. The disparity of performance between the size of companies is as wide as it has ever been, and it makes no sense to us.



Source: Goldman Sachs & Co.

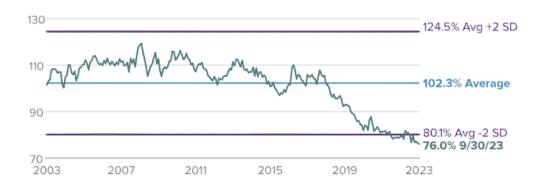
The above chart depicts bearish sentiment. Are there problems in the world? Yes, there clearly are a number of pressing issues. Higher interest rates, a war in Ukraine and, now, the Middle East, and inflationary pressures are all major concerns. But bottoms in stock markets nearly always occur when bearishness is at its highest levels. And the opposite is true of tops in markets.



Source: Goldman Sachs & Co.

Here is a chart that shows that the unwind of US equities has reached an extreme level as we exited the quarter and continued into the Fall. Bottoms usually occur with extreme levels of selling and that is what we have recently faced.

Relative Valuations for Small Cap vs. Large Cap Growth Remain Near Their Lowest in 20 Years Russell 2000 vs. Russell 1000 Median LTM EV/EBIT<sup>1</sup> (ex. Negative EBIT Companies) from 9/30/03 through 9/30/23

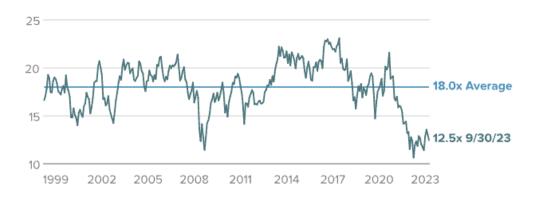


Last twelve months Enterprise Value/Earnings Before Interest and Taxes. Past performance is no guarantee of future results

There are few better experts in the small cap world than Royce Investment Partners, who have managed money in the space for over six decades. The story for the chart above posted in one of their recent publications is not just that the stocks of small caps have experienced historical underperformance versus those of the large cap space, but that the relative valuations for small cap versus large cap growth (last 12 months EV/EBIT) are at 20-year lows. One might posit that the reason for this disparity is because the S&P 500 has higher earnings estimates than the Russell 2000. That is actually not true. Consensus earnings estimates for the Russell 2000 Index indicate +24.7% growth in 2024 relative to 2023, as opposed to +11.11% for the S&P 500 Index.

#### Small Cap P/Es Have Come Down Amid Lackluster Returns

Weighted Harmonic Average Price-to Earnings Ratio (Excluding Non-Earners) for the Russell 2000 from 9/30/98-9/30/23



It isn't only about relative valuations of one asset class to the next. The above chart, also from Royce, shows that the actual P/E ratio for the Russell 2000 has gone down measurably over the last few years. One would certainly expect that higher rates would lead to lower multiples, but the multiples are now lower than the long-term growth rates, arguing for an inexpensive asset class. Additionally, given we believe the Fed is likely near the end of its interest rate hiking cycle, it is possible that rates have hit or are close to hitting a peak and therefore multiples should be close to hitting or at a trough.

Last Rate Hike	S&P 500 6mo Return	Russell 2000 6mo Return	S&P 500 12mo Return	Russell 2000 12mo Return
March 1980	12.11%	18.43%	16.05%	27.13%
December 1980	-2.82%	13.10%	-9.50%	-0.65%
Auguest 1984	7.36%	12.59%	12.71%	13.53%
September 1987	-15.60%	-18.63%	-16.49%	-14.48%
February 1989	21.67%	14.85%	14.90%	1.54%
February 1995	18.97%	20.75%	35.73%	28.44%
May 2000	-6.39%	-4.92%	-12.35%	-1.85%
June 2006	11.43%	10.27%	18.11%	16.71%
December 2018	19.73%	17.91%	30.55%	26.09%
Average	7.38%	9.37%	9.97%	10.72%

Source: Bloomberg, Putnam

If in fact we are at or near the end of the interest rate hiking cycle, the table above supports a conclusion that small caps are poised to perform well on an absolute basis and also outperform large cap names should the future play out similarly to the past when looking at the ensuing 6-month and 12-month periods following the last Fed rate hike.

Negative Return Year	Russell 2000 Performance	Subsequent Year
1981	-1.50%	20.66%
1984	-9.59%	27.95%
1987	-10.25%	22.42%
1990	-21.30%	43.35%
1994	-3.26%	26.47%
1998	-3.83%	19.59%
2000	-4.32%	1.02%
2002	-21.58%	45.37%
2007	-2.75%	-34.80%
2008	-34.80%	25.22%
2011	-5.45%	14.64%
2015	-5.71%	19.48%
2018	-12.18%	23.72%
2022	-21.56%	?
Average	-10.50%	19.62%

Source: Bloomberg, Putnam

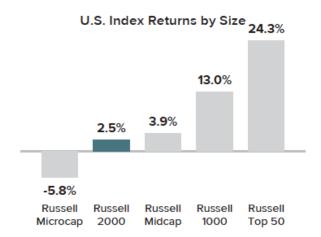
While there is no guarantee that past performance is indicative of future performance, small cap stock returns have been positive 92% of the time following a year in which they post negative returns, including posting twice the average annual performance in all other years. As seen above, when looking back to 1981, 2023 is set to be one of the "8%" years where a down year was followed by a second down year. Given where we are in the rate cycle, the historic underperformance of the indices coupled with historically low relative fundamental valuations, we strongly believe that 2024 will not be a repeat of 2023.

Table 1 - Combined outflow of about \$1B from Small Caps; Big inflow to XLU

Ticker	Name	Category	Beg. '23 Assets	Curr Assets	1Wk Flows	From Beg. '23 Flows	1Wk % Flows	From Beg. '23 % Flows
SPY	SPDR S&P500 ETF	Large Cap	357,567.1	393,255.0	-4,983.7	-5,332.4	-1.2	-1.5
IVV	iShares Core S&P 500 ETF	Large Cap	290,187.0	340,682.8	3,024.2	20,497.1	0.9	7.1
voo	Vanguard S&P 500 ETF	Large Cap	262,923.3	322,616.9	2,060.8	31,937.2	0.6	12.1
IWF	iShares Russell 1000 Growth ETF	Large Cap Growth	59,547.3	69,516.5	92.8	-3,629.1	0.1	-6.1
VUG	Vanguard Growth ETF	Large Cap Growth	68,331.7	89,805.7	250.9	2,106.0	0.3	3.1
IVW	iShares S&P 500 Growth ETF	Large Cap Growth	28,153.2	33,695.9	-73.0	991.6	-0.2	3.5
IWD	iShares Russell 1000 Value ETF	Large Cap Value	54,401.8	46,963.1	22.4	-6,328.0	0.0	-11.6
VTV	Vanguard Value ETF	Large Cap Value	99,547.4	96,210.0	181.6	846.4	0.2	0.9
IVE	iShares S&P 500 Value ETF	Large Cap Value	24,746.4	23,508.5	-190.0	-2,288.0	-0.8	-9.2
VIG	Vanguard Dividend Appreciation ETF	Dividend	65,728.6	65,607.0	138.3	-600.3	0.2	-0.9
DVY	iShares Select Dividend ETF	Dividend	23,098.0	17,457.3	-63.4	-2,682.9	-0.4	-11.6
VYM	Vanguard High Dividend Yield ETF	Dividend	50,334.1	46,484.0	-258.8	-245.6	-0.5	-0.5
SDY	SPDR S&P Dividend ETF	Dividend	23,693.1	19,584.7	-84.7	-1,754.3	-0.4	-7.4
NH	iShares Core S&P Mid-Cap ETF	Midcap	63,849.6	68,824.7	-71.6	5,630.6	-0.1	8.8
MDY	SPDR S&P MidCap 400 ETF Trust	Midcap	18,459.3	17,878.9	-244.8	-586.1	-1.3	-3.2
VO	Vanguard Mid-Cap ETF	Midcap	50,095.8	51,168.0	133.2	1,369.9	0.3	2.7
IWR	iShares Russell Mid-Cap ETF	Midcap	27,335.1	26,775.8	0.0	-547.9	0.0	-2.0
IWP	iShares Russell Mid-Cap Growth ETF	Midcap Growth	11,831.5	12,076.6	-103.9	-554.9	-0.8	-4.7
IJK	iShares S&P Mid-Cap 400 Growth ETF	Midcap Growth	7,052.2	7,227.0	10.6	-35.8	0.1	-0.5
VOT	Vanguard Mid-Cap Growth ETF	Midcap Growth	9,354.5	10,278.2	34.2	385.4	0.3	4.1
IWS	iShares Russell Mid-Cap Value ETF	Midcap Value	13,036.3	11,610.9	-137.8	-1,001.4	-1.1	-7.7
VOE	Vanguard Mid-Cap Value ETF	Midcap Value	16,081.0	14,624.0	-57.7	-556.3	-0.4	-3.5
IJ	iShares S&P Mid-Cap 400 Value ETF	Midcap Value	7,479.6	6,432.6	20.0	-828.4	0.3	-11.1
IWM	iShares Russell 2000 ETF	Small Cap	52,669.2	49,861.9	-737.7	-1,579.7	-1.4	-3.0
IJR	iShares Core S&P Small-Cap ETF	Small Cap	65,197.5	64,398.7	-171.1	1,919.6	-0.3	2.9
VB	Vanguard Small-Cap ETF	Small Cap	40,702.9	42,343.7	-4.8	1,904.3	0.0	4.7
IWO	iShares Russell 2000 Growth ETF	Small Cap Growth	9,542.6	9,021.8	-130.5	-703.3	-1.4	-7.4
VBK	Vanguard Small-Cap Growth ETF	Small Cap Growth	12,051.7	13,048.2	13.8	592.5	0.1	4.9
UT	iShares S&P Small-Cap 600 Growth ETF	Small Cap Growth	5,242.4	4,751.3	5.4	-494.5	0.1	-9.4
VBR	Vanguard Small-Cap Value ETF	Small Cap Value	23,948.1	23,182.4	-103.3	-11.7	-0.4	0.0
IWN	iShares Russell 2000 Value ETF	Small Cap Value	11,980.1	10,029.5	-1.5	-1,367.0	0.0	-11.4
IJS	iShares S&P Small-Cap 600 Value ETF	Small Cap Value	6,843.5	6,157.2	52.6	-257.4	0.8	-3.8
USMV	iShares Edge MSCI Min Vol USA ETF	Low Volatility	30,047.4	27,709.8	-129.5	-2,064.3	-0.5	-6.9
SPLV	PowerShares S&P 500 Low Volatility	Low Volatility	10,862.4	7,896.8	-174.6	-1,970.6	-2.2	-18.1
XMLV	PowerShares S&P MidCap Low Volatility	Low Volatility	1,166.1	833.5	-2.4	-237.2	-0.3	-20.3
XSLV	PowerShares S&P SmallCap Low Volatility	Low Volatility	711.4	381.8	0.8	-248.5	0.2	-34.9
VNQ	Vanguard REIT ETF	Real Estate	33,545.1	28,836.9	-59.3	-1,104.0	-0.2	-3.3
IYR	iShares U.S. Real Estate ETF	Real Estate	3,858.9	2,351.4	-230.9	-1,245.5	-9.0	-32.3

Source: Jefferies

Never underestimate the effect of flows of investor capital on the value of public market assets, especially equities. And, as you can see above, there was \$5.1 billion of year-to-date inflows into the iShares Core S&P 500 ETF and the Vanguard S&P 500 ETF; at the same time there was combined outflow of \$1 billion from small cap funds. In the case of the Russell 2000 Value ETF, the outflow was a staggering 11.4% of the entire asset base. There is almost no question that the price dislocation seen in the small cap universe is a direct result of indiscriminate selling by ETFs and other funds facing redemptions. Again, this trend is normal for equity market bottoms, not tops.

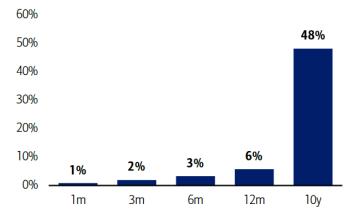


Source: Royce Investment Partners

In this chart you can see the effects of the outflows on specific performance of stocks based on size. Through September 30, 2023, there is a historically large 3,000+ basis point disparity between small and large indices.

Exhibit 26: Valuations have the highest explanatory power over long-term (ten-year) returns

 $R^2$  of relative forward P/E vs subsequent return spread over various time horizons (since 1985): Russell 2000 vs Russell 1000, as of 9/30/2023



Note: Represents the relationship between the relative forward PE for the Russell 2000 vs the Russell 1000 (since 1979) and subsequent rolling returns differential **Source**: BofA US Equity & Quant Strategy, FactSet

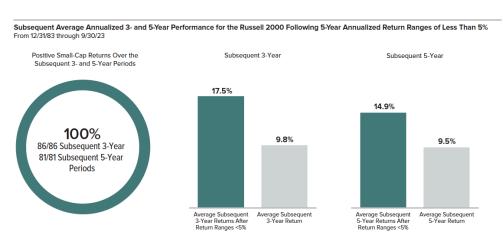
We have long stated that the price you pay for the business you are buying is a key factor in determining one's ultimate success in an investment. If you buy a good business at the wrong time, you may lose money. If you buy a less than good company at the right time, you may make money. The above chart, published by Bank of America, shows that while valuations tend to be a poor short-term timing indicator, they do matter for longer term returns. Note that this above chart represents the relationship between the relative P/E for the Russell 2000 versus Russell 1000 and subsequent rolling returns differential. Simply put, valuation has the highest explanatory power over long term returns; and we know today small caps are historically attractive using that metric.

Rate Hike Dates		1-Year R Following Initi		3-Year Annualized Return Following Initial Rate Hike		
INITIAL	FINAL	RUSSELL 2000	S&P 500	RUSSELL 2000	S&P 500	
3/1/1972	5/1/1974	_	6.4	_	-5.4	
4/21/1976	3/3/1980	_	0.6	_	4.2	
8/7/1980	5/8/1981	27.0	12.2	25.7	15.3	
5/2/1983	8/21/1984	-2.4	4.4	13.1	18.1	
3/29/1988	2/24/1989	13.7	16.6	8.9	17.1	
2/4/1994	2/1/1995	-2.7	4.8	13.9	21.9	
6/30/1999	5/16/2000	14.3	7.2	1.7	-9.2	
6/30/2004	6/29/2006	9.4	6.3	13.4	11.7	
12/16/2015	12/19/2018	20.6	11.3	8.6	10.1	
3/16/2022	_	-11.5	-7.6	_	_	
Average		8.6	6.2	_	_	
Avg. not inclu	ding 3/16/22	11.4	7.8	12.2	9.3	

Here is another table from Royce Investment Partners' September Small Cap Market Overview. In this piece, Royce states:

"History shows that one year after the initial tightening by the Federal Reserve, the average returns for the Russell 2000 and the S&P 500 were positive. Yet today, 18 months after the initial Fed tightening in March of 2022, returns for both the Russell 2000 and the S&P 500 were negative through the end of September. This diversion from the historical norm shows that the market may have already priced in a potential recession."

We agree with this assessment and see it as another piece of evidence that we are closer to a bottom than is likely appreciated by most investors.



The above chart above and commentary below is again attributed to Royce Investment Partners. We love any statistic which has a 100% success rate.

"Small cap's historical return pattern shows that below-average return periods have been followed by those with above-average returns, with a much lower-than-average frequency of negative return periods. Specifically, the Russell 2000 had positive annualized three-year returns 100% of the time—that is, in all 86 periods—averaging an impressive 17.5% following five-year periods of less than 5% annualized returns. At the same time, five-year returns had positive annualized returns 100% of the time-that is, in all 81 periods-averaging 14.9%."

While the future may be different than the past, it is hard to ignore this trend given its accuracy to date.

Average Returns for the Russell 2000 During the First 12 Months of a Recovery Depending on Entry Point From 10/5/79 through 6/16/22



And finally, regarding market timing, this chart from Royce Investment Partners shows that missing the rally's earliest stage has been costly in terms of maximizing return potential. When is this period going to end? We don't know, but we do know that many companies are trading at historically low valuations, and, just like late 2008 and early 2009, it's possible the environment could change for the better at any time.

We can debate opinions, but we can't debate facts. Every chart depicted above shows historically low valuations and significant underperformance for small cap stocks. We are very comfortable with our view that stocks in these markets have discounted a lot of bad news, that quite simply, has not occurred in 2023. The starting point is price, and we believe the price is right for the potential for material upside in these markets.

## **Forward-Looking Statements and Disclaimers**

This shareholder letter may contain statements of a forward-looking nature relating to future events. These forward-looking statements are subject to the inherent uncertainties in predicting future results and conditions. These statements reflect the Company's current beliefs, and a number of important factors could cause actual results to differ materially from those expressed in this press release. Please see the Company's securities filings filed with the Securities and Exchange Commission for a more detailed discussion of the risks and uncertainties associated with the Company's business and other significant factors that could affect the Company's actual results. Except as otherwise required by Federal securities laws, the Company undertakes no obligation to update or revise these forward-looking statements to reflect new events or uncertainties. The reference and link to any websites have been provided as a convenience, and the information contained on such website is not incorporated by reference into this shareholder letter. 180 Degree Capital Corp. is not responsible for the contents of third-party websites. The information discussed above is solely the opinion of 180 Degree Capital Corp. Any discussion of past performance is not an indication of future results. Investing in financial markets involves a substantial degree of risk. Investors must be able to withstand a total loss of their investment. The information herein is believed to be reliable and has been obtained from sources believed to be reliable, but no representation or warranty is made, expressed or implied, with respect to the fairness, correctness, accuracy, reasonableness or completeness of the information and opinions.