Trumbower Financial Advisors, LLC
1st Quarter 2019
Investment Market Commentary

Managing Market Mood Swings

Investors took a dose of Prozac and shook off their Q4 2018 breakdown. The S&P 500 ascended 13.65%, its best quarter since September 2009. Mid and Small Cap US equities rose neck to neck at 14.49% and 14.58%. The mood overseas lightened and delivered respectable results - 9.04% Developed and 9.91% Emerging – but tepid compared to US market sentiments. As noted below, International equity returns over the past 12 months remain negative.

Euphoria abounded within Technology and Industrial sectors sending them up 19.37% and 16.64%. A 32% jump in oil prices jollied the Energy sector up 15.42%. Healthcare and Financial sectors attracted less enthusiasm adding 6.12% and 7.9%, respectively, in Q1.

As is often the case when stocks rally, Growth dominated Value across US equity asset classes. The disparity was most pronounced among Small Caps - the Russell 2000 Growth overshadowed Value by 5.21%. The spread among Large Caps was narrower at 2.76% and the preference for Growth in Mid Cap asset class more restrained at 0.93%.

There was nothing "fixed" about Fixed Income. The yield on the 10-year Treasury toppled -0.25% ending the quarter at 2.41%, a -25% freefall since peaking in early November last year. At quarter end there was a mere 0.01% difference between the 3-month and 10-year. The curve inverted for the first time since 2007 on March 22nd. Investors were agitated by the historical link between inversion and recession. The long-term curve only remained upside down for 5 days but anxiety persisted when gloomy German manufacturing results hit the street.

J.P. Morgan reports that since 1962 the average period from inversion to recession has been 14 months and in 2 instances recession was avoided. Former head equity trader at Northern Trust says the stock market tends to put on the brakes 8 months

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Selected Benchmark and Category Average Returns

Large Cap Equity

*Benchmark Indx & Category Average**	*(Total Return)* **1st Q 2019**	**12 Mos.**
S&P 500 Growth	14.95	12.77
Large Cap Gr Avg	16.09	11.03
S&P 500 Value	12.19	5.93
Large Cap Val Avg	11.28	3.84
S&P 500 Index	13.65	9.50
Large Cap Blnd Avg	12.53	6.04

Mid Cap Equity

*Benchmark Indx & Category Average**	*(Total Return)* **1st Q 2019**	**12 Mos.**
S&P MC 400 Growth	14.95	1.69
Mid Cap Gr Avg	18.95	9.47
S&P MC 400 Value	14.02	3.60
Mid Cap Val Avg	13.95	-0.39
S & P 400 Index	14.49	2.59
Mid Cap Blnd Avg	14.36	1.65

Small Cap Equity

*Benchmark Indx & Category Average**	*(Total Return)* **1st Q 2019**	**12 Mos.**
Russell 2000 Growth	17.14	3.85
Small Cap Gr Avg	17.18	7.38
Russell 2000 Value	11.93	0.17
Small Cap Val Avg	12.43	-2.95
Russell 2000	14.58	2.05
Small Cap Blnd Avg	13.44	-0.47

International Equity

*Benchmark Indx & Category Average**	*(Total Return)* **1st Q 2019**	**12 Mos.**
MSCI EAFE	9.04	-6.49
Intl Equity Avg	10.42	-6.66

* **Category average** calculated using *Morningstar Direct*. Fund universe screened to include funds that meet the following criteria:

- **A.** M-Star Category consistent with designated asset class and management style.
- **B.** M-Star Style Box consistent with designated management style.
- **C.** Fund's Objective consistent with asset class.
- **D.** Excludes Index Funds.

We have not independently verified *Morningstar* data.

1st Quarter Equity Market Results

	1st Qtr. % Chg.	12-mo. % Chg.
S&P 500	13.65	9.50
S&P 400	14.49	2.59
Nasdaq	16.81	10.63
Russ 2000	14.58	2.05
MSCI EAFE	9.04	-6.49
MSCI Emg MMkt	9.91	-7.41

Equal Rights for Indexes

Indexes are used to measure all sorts of activities. In the world of finance, indexes track the composition and performance of securities markets and segments. The most common methodology used to craft equity indexes is to weight the constituents by their market capitalization. Market cap is first determined by multiplying the number of shares outstanding by the stock price. Some providers make adjustments to eliminate shares that aren't for sale (free-float) and some do not. Rankings by capitalization within the target market, sector or segment then establish the amount of each company's stock the index holds. In other words, the higher the company's market cap the larger the position held by the index. Sounds reasonable since the objective is to accurately reflect what happens within a particular arena. If the index doesn't adjust for free-float, however, it may include major participants that are not as well represented in the open market.

Buy High Sell Low?

Investors can't buy an index, but there is a vast universe of index replication funds available, exchange traded and otherwise. The most popular products are modeled after market cap weighted indexes. The appeal for passive equity market exposure has boomed along with appetites for index-based securities. As a result, a side effect of the cap weighted approach known as "momentum" has been exacerbated. When a stock's market price rises cap weighted index funds need to buy more of it to maintain its rank within the fund. Ramped up demand continues to run up the price making the stock more susceptible to overvaluation. When tides turn momentum works in reverse as index funds jettison shares to meet target weights further softening prices. Market cap weighting in effect forces funds to buy high and sell low – not a winning investment strategy.

The top 10 holdings in the S&P 500 have comprised 20% of the index's market cap on average since 1990. During the late 1990s concentration at the top rose until it peaked at 26.6% in March of 2000 – right before the Tech Bubble burst. The index held 4% stakes in Microsoft, Cisco and GE at the time. Currently the S&P allocates 22.5% to its top 10 constituents with stakes in Alphabet, Amazon, Apple and Microsoft ranging from 3.02% to 3.83%. Each position starts out at .2% of the equal weight brand bringing the average percentage in the top 10 to 2.49%.

Buy Low Sell High!

One way to avoid the magnification effects of momentum is to equally weight the members of a given market segment index. Periodic rebalancing trims positions in stocks that have appreciated and adds to the allocation of stocks that have devalued. Funds that mirror equal weighted indexes are motived to buy low and sell high – universally considered a more desirable goal.

Index sponsors define markets and segments differently, impose varying criteria for inclusion and approaches to rebalancing. Not all equal weighted methodologies are created equal either. For example, S&P and MSCI take the same group of securities held in their cap weighted versions and simply allocate values equally. This can result in meaningful variation in sector exposure between the two. The S&P 500 equal weight has 6-7% less Tech/Communication Services and 3-4% higher Industrials/Real Estate. Russell equally weights sectors and then stocks within the sector to deliver industry neutral participation. This essay focuses on the results. Can the theoretical charms of equal weighted indexes dodge the dangers of downside momentum and improve returns?

Mid Cap Explains Results

At first glance, Large Cap US equal weight indexes such as S&P 500 and Russell 1000

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Equal Rights for Indexes
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performed better longer term than their cap weighted cousins. Equal weight S&P came out ahead in 74% of 5 year and 94% of 10 year rolling periods since 1990 while Russell equal weight topped 75% and 100%, respectively, since 2000. Digging deeper we find that equal weighting understandably lowers the average market cap of the S&P 500 from $105 billion to $25 billion. 40% of the equal weight S&P 500 consists of Mid Cap stocks compared to less than 10% in the cap weighted version. Mid Cap exposure in the cap weighted Russell 1000 is around 16% compared to 53% in the equal weighted variety. Average market cap falls from $81 billion to $13 billion – resembling the cap weighted Russell Mid Cap Index. Mid Cap US stocks have outperformed Large Caps over the long-term – but with greater volatility. Downside capture for the equal weight S&P 500 was roughly 2% worse than the cap weighted over 3, 5, 10 and 15 years. Risk adjusted equal weight Sharpe and Sortino metrics over the last 3 and 5 years were -16% to -30% lower than for cap weighted. While Mid Caps have proven to be profitable over the years, using the equal weighted Large Cap index may overshoot asset allocation targets and amplify risk.

MSCI EAFE and MSCI EM equal weight indexes also consistently outpaced cap weighted peers long-term with elevated Mid Cap exposure. However, the MSCI EAFE equal weight was not noticeably more volatile than its cap weighted counterpart as evidenced by its favorable risk adjusted metrics.

Ambivalent for Small Caps

Comparing equal and cap weighted index performance within Small Cap US equity asset class was less insightful. Data for the Russell 2000 equal weight index only goes back to 2000 and the S&P 600 started tracking equal weight in 2006. Russell's equal weight version came out ahead of the cap weighted in 55% to 60% of 1, 3, 5 and 10 year periods – not bad but not as compelling as Large Cap results. S&P 600 equal weight trailed cap weighted more often than not over the limited period for which data is available. A more ambivalent conclusion makes sense since top performing Small Cap stocks ultimately graduate to Mid/Large cap indexes reducing the potential for unhealthy momentum bearing concentration within the Small Cap weighted index.

Equal Weight vs Irrational Exuberance

The potential for steep momentum driven downside is a legitimate concern that can be alleviated – at least in the Large Cap and International equity markets - by using equal weight indexes. The approach effectively tamed fall-out from the Tech Bubble when the traditional cap weighted S&P 500 plummeted -45% from its peak. The equal weight index tumbled a mere -19%. Equal weighting did nothing, however, to fend off disaster during the more recent equity market collapse prompted by the "Financial Crisis". Equal weight dropped -58%, slightly more than the -55% decline for the cap weighted form. Both index types lost around -19% in the late 2018 downturn. This divergence is undoubtedly a function of valuations. Conditions in 2008 and 2018 were a far cry from the irrational exuberance that characterized the late 1990s.

From a practical perspective the universe of investable equal weight indexes is sparsely populated. 2 mutual funds and an ETF replicate the S&P 500 equal weight. Russell 1000 and the NASDAQ 100 also have equal weight options in the Large Cap space. Morningstar's mutual fund and ETF database only turned up 10 equally weighted broad-based index funds and only 6 of them over the $100 million asset value threshold typically considered suitable for an ETF. There are no Developed Foreign equally weighted funds available at this time.

Mood Swings
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after the yield curve inverts – ahead of recession. Citing data surrounding 8 inversions he found response times inconsistent. The period between inversion and market peak ranges from -1 to 18 months. In some instances stock prices advanced significantly before succumbing to a recession.

In a 2018 study, Federal Reserve economists attempted to alleviate yield curve angst to some extent. Credit crunches bear the blame for recessions they conclude – inversions merely reflect market responses to monetary policy. Inversions have historically occurred at the end of a tightening cycle when spreads are naturally narrower. If the market senses tightening may have gone too far the long end of the curve flattens in anticipation of a policy reversal to combat the looming recession. Reading between the lines - flawed monetary policy triggers credit crises which spawn recessions.

This explanation seems a little simplistic when one looks back on the 2007/2008 debacle that triggered our most recent severe economic retraction. As we recall, pyramid schemes hawked by investment bankers and lenders gone wild crumbled for lack of a foundation when interest rates ticked up and the value of questionable collateral cratered.

A 2019 study update revealed that recession risk - measured by the Fed's supposedly more reliable "near-term forward spread" - increased to 50% in January, ahead of the inversion. This may have contributed to recent promises of patience and flexibility by Chairman Powell. If the Fed has in fact taken a well-timed break – justified with inflation under target and an absence of speculative excess – perhaps this economy can challenge the predictive prowess of the inversion.

Despite the FOMC's calming elocution, equities finished off mid-quarter highs. China has upped the ante on fiscal easing hoping to cheer up its consumers and perk up its tariff troubled economy. Even if they are successful, is China's ripple effect on global growth strong enough to offset another prolonged slump in the Eurozone? The region's obvious challenges are Brexit and Italian banks but the pending changing of the guard has charged the air with further uncertainty. Angela Merkel is a lame duck, Macron's reforms have yet to bear fruit in France and no highly respected successor has been named to retiring ECB president Draghi. The institutions created to defend Eurozone economies from another crisis are in place. It remains to be seen if new leaders can overcome divisiveness long enough to use them effectively.

By the time you read this earnings season will be in full swing. Mixed US economic data and prospects for decelerating global growth are manifested in tempered expectations. Earnings per share "EPS" for S&P 500 companies are projected to decline -3.9% compared to Q1 2018 and -7.2% from Q4 2018. Earnings guidance was lowered across all sectors during Q1 with 140 firms cutting their 2019 outlook. While the consensus thinks S&P 500 EPS will drop -2% in Q1, companies in the median forecast earnings growth of 2%. Similarly, 3% 2019 EPS growth is predicted on average, but 6% anticipated for the median (excludes outliers at both ends of the spectrum). When the largest members of an index like Apple and Alphabet sing the blues they cloud the bigger picture.

The prolonged government shutdown wiped out ~ $11 billion of economic activity ($3 billion possibly permanent) contributing to melancholy Q1 EPS growth as did industries deriving much of their revenues overseas. Energy sector profits will likely suffer the largest decline following oil's -40% price slide in Q4.

Revenue growth remains positive for all four quarters in 2019, averaging ~ 4.5% but margins are compressing. Investors should favor companies with strong pricing power who have proven their ability to remain profitable as costs rise. The earnings yield gap widened to nearly 350 basis points "bps" compared with its long-term average of 230 bps - an indication that stocks are more attractive than bonds. The S&P 500's 12-month forward P/E of 17X reinforces this conclusion. While it has risen since December, it remains well below 23X one year ago.

It is worth noting that Wall Street loves it when companies beat estimates, so setting the bar low could actually impact prices positively. All of these factors suggest that selective stock pickers may have an opportunity to keep investors in a good mood in spite of all the pessimism.