



"Bull markets are born in pessimism, grow on skepticism, mature on optimism and die on euphoria. The time of maximum pessimism is the best time to buy, and the time of maximum optimism is the best time to sell."
– Sir John Templeton¹

For most, 1992 was not a year of great significance, at least not 26 years later. For investment practitioners, 1992 marked a seismic shift in what we knew to be true one day and much less special the next. This shift was a direct result of the publishing of *The Cross Section of Expected Stock Returns* by Eugene Fama and Kenneth French. Until this date, investors believed that portfolio returns could be described by a single factor, beta, or a stock's risk relative to the market. Drs Fama and French found that in addition to a portfolio's risk, the size of the securities held or market capitalization, as well as the company's valuation level, contributed and could be used to explain a portfolio's return. The simple act of owning smaller market capitalization or inexpensively valued companies were techniques that one could use to improve upon market returns, or "outperform" a simple market portfolio. This has come to be known as the Fama French small and value premiums. Their findings were Nobel Prize winning and completely demystified what many active fund managers had been doing for decades. What was once attributed as alpha (i.e. skill), now had become beta (market driven forces) in the blink of an eye. Legendary managers, to many, now seemed ordinary, even though this probably shouldn't change our opinions of them. The fact is, the active managers that were astute enough to identify and use these techniques prior to the Fama French paper were years, if not decades, ahead of their time.

Despite the historical efficacy of the Fama French research, these Nobel Prize winning methodologies have not worked over the past 13 years. Small cap stocks have trailed the S&P 500 by approximately 5% while value has trailed by nearly 30%. The purpose of this quarter's Market Insights is to delve deeper into these factors. We hope to provide a clearer understanding of how these factors work, what if anything may be causing them to fail in recent years, and if this trend is a new normal or a trend that's due for a reversal.

Background

While hardly groundbreaking at this point, in 1992, the Fama and French research was truly earth-shattering. From 1936, even extending to present day, smaller companies and inexpensively valued companies not only outperformed the broader market, they absolutely walloped it. That said, an investor in any of the three portfolios (small, value, or S&P 500) would have likely been happy with the outcome. If you had invested just \$100 in the S&P 500 index in 1936 it would be worth a tidy sum of \$363,982 through April of 2018. That same \$100 invested in inexpensive stocks (i.e. value stocks) would have grown to \$1.8mm, and to an extraordinary \$2.5mm if invested in the stocks of small companies. Now keep in mind, this is an 80+ year time frame...probably longer than most of us have as investors, but nonetheless an impressive academic result as seen in Chart 1. The same relationship is shown in Chart 2, but in relative space. That is, each series divided by the S&P 500 return as the base. The point of this is to see where each asset out or underperforms the broader market. We know that over 80 years both win the race against the S&P 500 rather handily, but do they always win? The answer to that question is obviously no.

¹ Sir John Marks Templeton (29 November 1912 – 8 July 2008)[1] was an American-born British investor, banker, fund manager, and philanthropist. In 1954, he entered the mutual fund market and created the Templeton Growth Fund.[2] In 1999, Money magazine named him "arguably the greatest global stock picker of the century."
Source:Wikipedia

In Chart 2, each asset can be seen outperforming the S&P 500 when either line is upward sloping. By contrast, when lines are downward sloping the S&P is winning (i.e. small or value are trailing) during that specific timeframe. In fact, one can visually connect any two points of the same colored line on Chart 2 and determine what won or lost over that time frame. For example, from the peak of the gray line in May of 1983 to April of 2018, a \$100 investment in the S&P 500 would have grown to \$4,082, while a similar investment in small cap stocks would only be worth \$3,752. Small stocks trailed the S&P 500, consistent with the downward plane between these two points. Similarly, and almost ironically, from July 1992, immediately after the publication of the Fama French paper, and to current day, value stocks also underperformed, trailing by a margin of \$1,090 to \$870. How's that for market efficiency?! The instant that Fama & French revealed the winning formula, it stopped working.

So, where are we? Small cap and value stocks tend to outperform the market substantially over very long academic time horizons, in our case 80+ years. But, as we've shown, on average doesn't mean always. In fact, we demonstrated two very long periods, one for small cap beginning in 1983 and the other for value beginning in 1992 (there are others as well) and both extending to present day, where neither technique worked. That's about 35 years for small cap and 26 years for value, where neither outperformed the market. The key takeaway for investors is that there can be periods of time that are exceptionally long when placed in the context of an investor's personal time horizon, where neither risk premium works, even if they work over longer academic horizons like 80+ years. How many of us have a long enough time horizon where we can afford to lose for 35 years.... or even 26 years for that matter? For this reason, we would argue that investors should not rely on these, or any other "silver bullets" as permanent strategic solutions for their portfolios. There is no such thing as an investment that works always and forever.

Small Cap & Value over Time

Chart 1

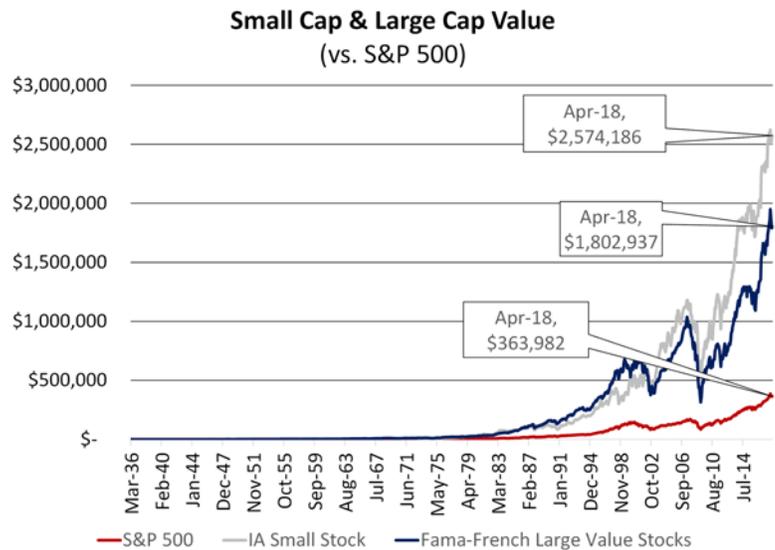
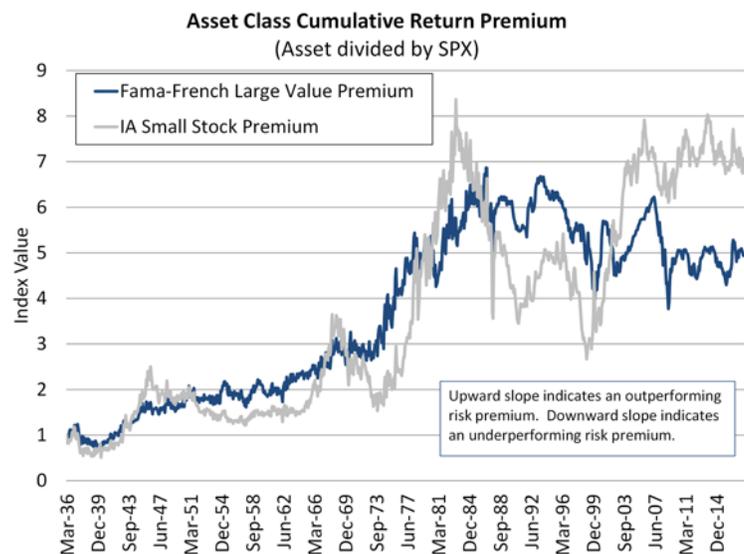


Chart 2



Data Source: MPI Stylus, Ibbotson Associates, Morningstar

What causes value and small cap to out or underperform?

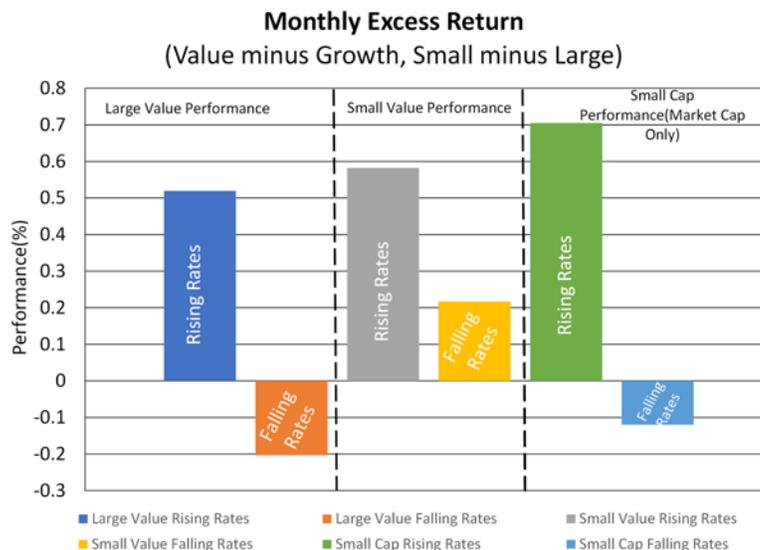
There are probably several different factors that can be linked to the out or under performance of each factor. I would like to tackle two, interest rates and relative valuations. First, are value stocks and/or small cap stocks cheap or expensive when they underperform? Second, what do rising or falling interest rates do to each?

Last quarter we examined how changing interest rates affect both stocks and bonds in general. We found that through much the same mechanism, changing of the discount rate, both stocks and bonds were impacted. Bonds rise and fall with interest rates through a mechanism called duration (a measure of a bond's interest rate sensitivity). Essentially, bonds that return money to the investor at faster rate are less interest rate sensitive. This return of capital is done through a bond's coupon payments and its par payment at maturity. Longer maturity and zero-coupon bonds tend to return money slower to investors and thereby have a higher duration (more interest rate sensitivity).

Why does this matter? When evaluating stocks by market cap and style we can segment them into those that return money to the investor sooner, value and large cap stocks, and those that take longer to return money to the investor, growth and small cap stocks. The mechanism to which I'm referring is the dividend yield. Both value and large cap stocks tend to have higher yields, than small cap and growth stocks. Theoretically, they each should have a lower equity duration and should be less interest rate sensitive. We see this hold true across styles in both large cap and small cap space, as value outperforms growth when rates rise, but underperforms when rates fall (as seen in Chart 3). This is consistent with its lower equity duration. This relationship fails to hold true across market cap when you remove the style factor from the equation. Small cap tends to perform better when rates rise, rather than falling, contrary to what its equity duration might imply. Two possible explanations for this are valuations trumping the change in interest rates and/or small cap's higher beta driving prices higher as equities rally when rates fall. While interest rates might be an influence on the small cap vs. large cap relationship, it isn't as strong of a relationship as the relative valuation of each. During the period used (from 1962 to present) there were several instances of extreme overvaluation and undervaluation of small cap stocks when compared to large caps. Valuations usually tend to be the most powerful influence over long periods regardless of what is being studied.

Rising Rates Impact on Cap & Style

Chart 3



Data Source: FRB, MPI Stylus, Ibbotson Associates 1962 – April 2018

Rising interest rates typically favors value stocks via their lower equity duration. This has not held true in the pure small cap vs large cap relationship, as small stocks have generally outperformed large, as rates rise. This is inconsistent with their higher duration. We can likely attribute this to their higher beta, along with several valuation extremes experienced by small cap over the period studied.

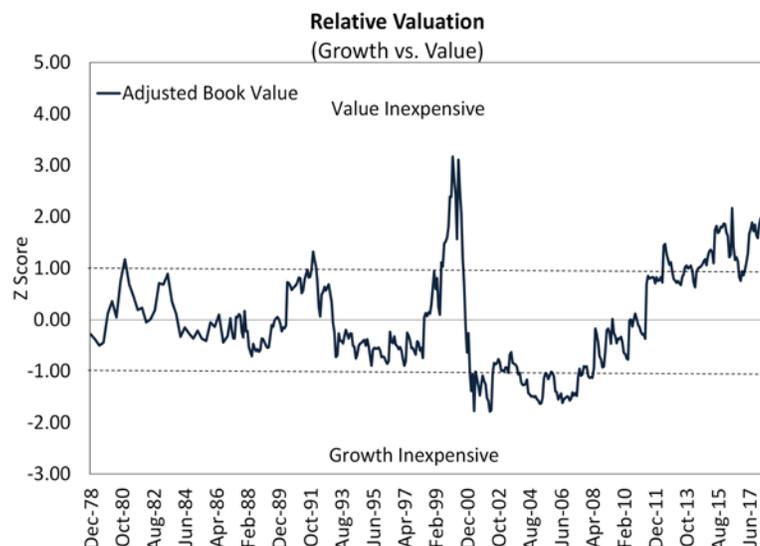
From a style perspective, it's clear that rising and falling rates influence the out and underperformance of value stocks, when compared to their growth counterparts, in both large and small market capitalizations. In large cap space, the monthly outperformance of value stocks, in periods when rates rise, is approximately 52 bps per month, or roughly 6.5% per year. By contrast, when rates fall, value trails growth by about 20 bps per month, or 2.5% per year on average. In the small capitalization range, the relationship is largely the same with one exception. Over long periods like this one, value seems to outperform growth regardless of whether rates are rising or falling. The outperformance is significantly more pronounced during rising rate environments, consistent with what we saw with large value. We have witnessed this in other areas of our research. It would appear that unless small growth stocks are extremely undervalued relative to their value counterparts, they rarely outperform over any sufficiently long time horizon.

For the past several years, value has experienced several periods of fits and starts with regards to its out or underperformance relative to growth stocks. Most recently, value has had more fits than starts. Since the bottom of the 10-year treasury yield in July 2016, value has marginally outperformed growth using the Fama French data series, but trailed outright using the Russell series. In either case, this was in a period where interest rates were clearly rising. As we dissect this further, we can see that the 10-year yield moved up aggressively from July 2016 to December of 2016, climbing nearly 100bps. During this time, value outperformed growth by approximately 20%, as we would expect. Since then, despite six rate hikes by our central bank, resulting in a 1.5% increase in the Federal Funds rate, the 10-year bond has only increased by 38bps. Value stocks have struggled, trailing growth by nearly 18%, but in turn creating one of the greatest value opportunities in history. As seen in Chart 4, US Large Value stocks have only been cheaper when compared to growth stocks in two other instances: June 2016, immediately prior to the 20% outperformance experienced before the Fed Rate hike campaign began, and the internet bubble.

Much like the euphoria that led to the internet bubble, growth stocks have experienced a similar pattern in the last few years that caused value stocks to trade at compelling discounts, as compared to their growth counterparts. As was the case in 1999, US Value stocks were far and away among the best of a bad bunch. Let me be clear, other opportunities across the globe are likely to be an even better use of capital than buying US value stocks, or any US stocks for that matter. Valuations in emerging markets, international developed markets, and commodities futures are, in our opinion, especially compelling. While we have positioned our portfolios to

Value Opportunity

Chart 4



Data Source: FTSE Russell, iCM Capital Markets Research

Large Cap Value Stocks have only been cheaper (growth stocks have only been more expensive compared to value) when compared to their growth counterparts in two instances over the last forty years --the internet bubble and 2016. Both led to a subsequent period of value dominance.

favor these non-dollar assets, what we do own within the US, for diversification purposes, is focused first on high quality US equities and second on US value stocks, consistent with our philosophy of broad diversification among a series of undervalued assets. While not quite as stretched as 1999, valuations for US equities overall, and especially in growth stocks, are very high. This has typically not led to favorable results. As the old saying goes, fool me once shame on you. *Fool Me Twice Shame on Me!* Thank you for your trust and confidence.

3rd quarter 2018⁸ Market Insights is intended solely to report on various investment views held by Integrated Capital Management, an institutional research and asset management firm, is distributed for informational and educational purposes only and is not intended to constitute legal, tax, accounting or investment advice. Opinions, estimates, forecasts, and statements of financial market trends that are based on current market conditions constitute our judgment and are subject to change without notice. Integrated Capital Management does not have any obligation to provide revised opinions in the event of changed circumstances. We believe the information provided here is reliable but should not be assumed to be accurate or complete. References to specific securities, asset classes and financial markets are for illustrative purposes only and do not constitute a solicitation, offer or recommendation to purchase or sell a security. **Past performance is no guarantee of future results.** All investment strategies and investments involve risk of loss and nothing within this report should be construed as a guarantee of any specific outcome or profit. Investors should make their own investment decisions based on their specific investment objectives and financial circumstances and are encouraged to seek professional advice before making any decisions. Index performance does not reflect the deduction of any fees and expenses, and if deducted, performance would be reduced. Indexes are unmanaged and investors are not able to invest directly into any index. The S&P 500 Index is a market index generally considered representative of the stock market as a whole. The index focuses on the large-cap segment of the U.S. equities market.

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