MANAGED ASSET PORTFOLIOS

Value versus Growth: History Stands on the Side of Value Investing

October 2015

Executive Summary

Since the global financial crisis struck in 2008, we have been witnessing a new chapter in the history of the financial markets. After the worst economic downturn since the Great Depression, central banks from around the world have been on a mission to stabilize markets and revitalize the global economy. They have utilized unconventional measures including zero interest rates, quantitative easing and even negative interest rates. The effects of these measures have yet to unfold, but it has increased investors' appetite for risk which is evident in both the bond and equity markets. One area that has grabbed our attention is the divergence that is occurring between growth and value stocks. During the seven years between October 10, 2008 and October 2, 2015, the return of the Russell 1000 Growth Index has outperformed that of the Russell 1000 Value Index by 5500 basis points. The dichotomy between growth and value has not been this large since the tech bubble in 1999 and we all know how that ended.

History suggests that this dichotomy is more of an anomaly than a new long term trend. Data shows that for the 31 years between 1980 and 2010, value stocks outperformed growth stocks on an annualized basis with less volatility as measured by standard deviation. This was true for every category of stocks when grouped by market capitalization and led us to investigate what is causing the current trouncing of value by growth.

We attribute it to three main causes: increased risk taking, low interest rates and slow global growth. These factors have caused investors to flock to companies that are experiencing revenue and earnings growth while shunning those stocks considered as value-based investments. As a result, they have pushed up the valuations of growth stocks to historic levels, which signal to us that the strategy has become overcrowded. We believe the return premium being generated by growth over value is going to come to an end shortly because of extreme valuations, increased uncertainty in the market and the possibility of interest rate increases. While we do not know exactly which force will cause the tide to turn, history suggests that now is the perfect time to integrate a value approach into one's portfolio.

Current State of Financial Markets

The last seven year period has been unlike any other in the history of the stock and bond markets. Central banks around the world have taken extraordinary measures to reboot the global economy and stabilize financial markets. The Federal Reserve, led by former Chairman Ben Bernanke, unleashed drastic measures including a zero percent Fed Funds Rate (ZIRP), QE1, QE2, Operation Twist and QE3 all in an attempt to rejuvenate the U.S. economy. Other developed market central banks including the Bank of Japan, Bank of England and European Central Bank have followed along with their own unconventional monetary policies.

This has led to a world where supposedly independent central banks have simultaneously increased their balance sheets and lowered interest rates to unprecedented levels, with some countries even yielding negative rates. It has yet to be seen what the long term consequences of these unconventional policies will be, but we have noticed certain effects in the equity markets that we believe can be directly attributed to this low interest rate environment and the attempts by central banks to increase the value of risk assets.

Largest Dichotomy Since the Tech Bubble

One of the more noticeable effects and possible ramifications of these policies has been the relative outperformance of growth stocks when compared to value stocks. Using the Russell 1000 Growth and Value indexes as a barometer, the outperformance by growth has been substantial. Again, looking at the period between October 10, 2008 and October 2, 2015, the return of the Russell 1000 Growth index has more than doubled that of its value counterpart, returning 111.40% compared to 55.68% for the Russell 1000 Value index.[1]

[1] Google Finance

This relative outperformance is evident beyond just these specifically categorized indices and has remained persistent amidst all of the uncertainty and volatility that has been in the markets over the past year. Within the S&P 500, Russell 2000 and MSCI ACWI Ex. US indices, the securities with the highest valuations have continued their trend of outperformance. This is evidenced when grouping the indices into quartiles based on a variety of valuation metrics including price to sales, price to book and price to earnings.

As shown in the table below, the biggest deltas in performance between high and low valuation stocks occurred in the Russell 2000, but the outperformance is clear across all three indices. To put this into perspective, stocks in the Russell 2000 with a price-to-book ratio above 5 have returned 30.66% over the past year, nearly 5000 basis points better than small-cap stocks with the lowest price to book ratio.[2] This dichotomy between growth and value stocks has not been this high since 1999 at the peak of the tech bubble.

	Valuation Metric	Bottom Quartile			Below Median			Above Median			Top Quartile		
		QTD Returns	*YTD Returns*	*One Year Returns*	*QTD Returns*	*YTD Returns*	*One Year Returns*	*QTD Returns*	*YTD Returns*	*One Year Returns*	*QTD Returns*	*YTD Returns*	*One Year Returns*
S&P 500	Price-to-Earnings	-13.48%	-16.67%	-14.86%	-10.56%	-13.04%	-9.18%	-2.23%	2.19%	8.93%	-1.06%	5.32%	10.24%
	Price-to-Sales	-11.77%	-13.13%	-9.56%	-9.40%	-10.90%	-6.53%	-3.95%	-0.55%	5.20%	-1.99%	3.53%	9.80%
	Price-to-Book	-11.87%	-15.15%	-13.26%	-9.69%	-11.85%	-8.99%	-4.12%	-0.32%	6.74%	-1.79%	4.61%	12.26%

	Valuation Metric	Bottom Quartile			Below Median			Above Median			Top Quartile		
		QTD Returns	*YTD Returns*	*One Year Returns*	*QTD Returns*	*YTD Returns*	*One Year Returns*	*QTD Returns*	*YTD Returns*	*One Year Returns*	*QTD Returns*	*YTD Returns*	*One Year Returns*
MSCI ACWI Ex US	Price-to-Earnings	-19.15%	-17.48%	-21.41%	-16.88%	-14.47%	-18.01%	-10.24%	-4.56%	-7.21%	-9.17%	-1.80%	-4.50%
	Price-to-Sales	-17.71%	-14.34%	-20.14%	-16.82%	-13.28%	-18.37%	-11.81%	-8.02%	-10.88%	-10.36%	-5.17%	-6.35%
	Price-to-Book	-21.28%	-20.109%	-28.59%	-18.14%	-15.70%	-22.21%	-10.60%	-5.73%	-7.23%	-8.90%	-2.70%	-3.44%

	Valuation Metric	Bottom Quartile			Below Median			Above Median			Top Quartile		
		QTD Returns	*YTD Returns*	*One Year Returns*	*QTD Returns*	*YTD Returns*	*One Year Returns*	*QTD Returns*	*YTD Returns*	*One Year Returns*	*QTD Returns*	*YTD Returns*	*One Year Returns*
Russell 2000	Price-to-Earnings	-14.52%	-15.22%	-8.84%	-10.90%	-9.48%	-1.79%	-4.41%	3.61%	15.14%	-3.35%	5.61%	17.24%
	Price-to-Sales	-18.63%	-19.64%	-16.47%	-13.85%	-12.63%	-7.19%	-5.53%	3.29%	15.46%	-5.15%	7.77%	22.66%
	Price-to-Book	-15.87%	-17.68%	-16.23%	-12.52%	-12.73%	-8.26%	-6.19%	4.83%	18.49%	-4.49%	14.41%	30.66%

Chart courtesy of Bloomberg

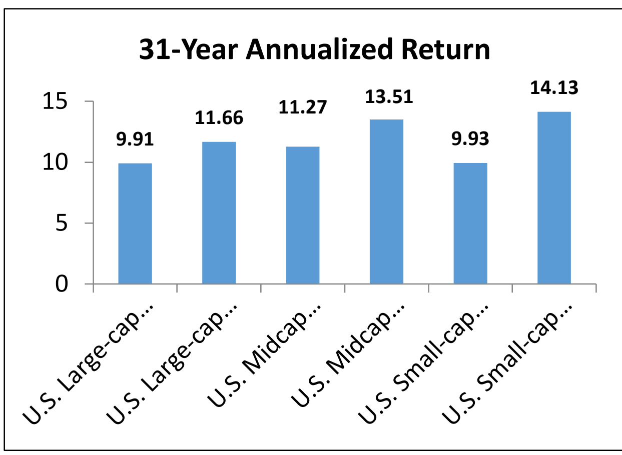
History of Value Stocks

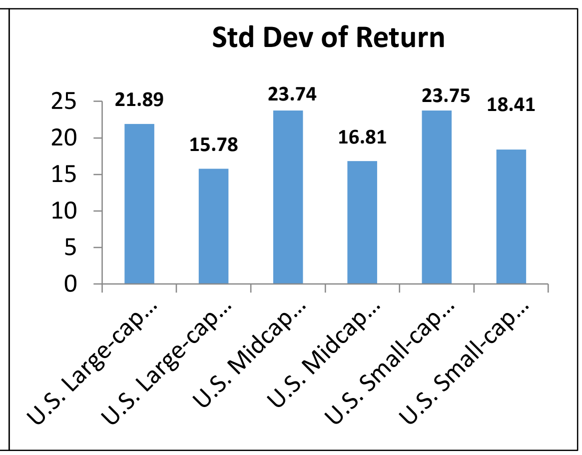
This dichotomy has caused many investors to question the worthiness of value stocks and to focus more on growth stocks. However, history would suggest that this may be a poor decision for long term investors as value stocks have demonstrated their ability to outperform their growth counterparts over the long term.

[2] Bloomberg

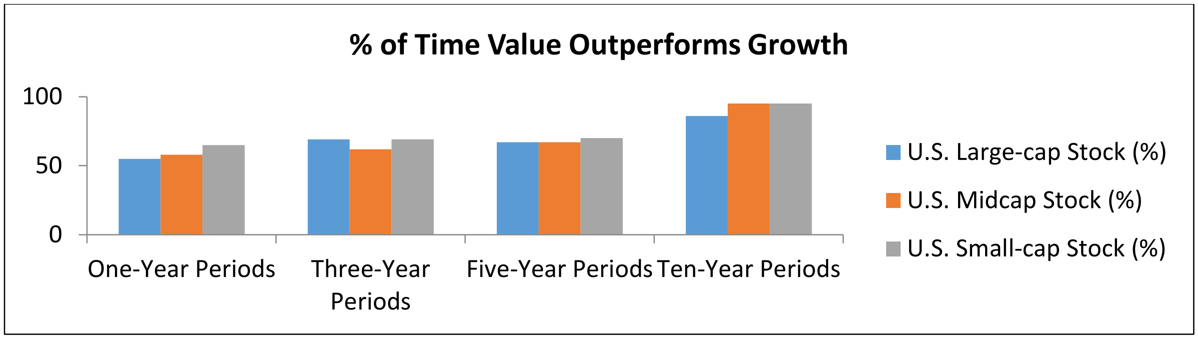
Looking at data from 1980 to 2010, Dow Jones Indices grouped by market cap (Small, Mid, Large) and by a value or growth classification, have demonstrated that value stocks outperformed growth stocks in every category with less risk as measured by standard deviation. In fact, when looking at this same data in ten year periods, large cap value stocks outperformed growth 86% of the time. The outperformance is even more prevalent in small and mid-cap stocks with value having a return premium to growth 95% of the time. Small and mid-cap value stocks have also generated the largest outperformance since 1980, with small cap value having a 420 basis point premium to growth and mid cap value having a 224 basis point premium.

Data from other indices such as the Russell 1000 Value and Growth indexes reflect a similar conclusion that value outperforms growth in the long run. From 1987 to 2013, the annualized return for the Russell 1000 Value index was 10.60% whereas the growth index returned 9.78%. The value index also had a lower standard deviation and downside capture ratio at 15.01% and 90.71% respectively, compared to 17.52% and 110.48% for the growth index. As shown in the following charts, all of this data suggests that although growth stocks have trounced their value counterparts as of late, there is strong evidence to validate the thesis that growth stocks will revert to their historic mean of underperformance compared to value.[3]





[3] "Comparing the results of value and growth stock market indexes." *fidelity.com*. Fidelity, n.d. Web. 5 Oct. 2015.



Why is Growth Outperforming Value?

After studying the data showing value stocks outperforming growth stocks throughout history, it raises the question as to what is currently causing the large return premium for growth stocks. We believe that there are a couple of key reasons why investors have flocked to growth stocks and have been willing to pay such high multiples on revenues, earnings and book value:

- First and foremost, it is the weak global economic condition that we have experienced throughout this anemic economic recovery. With weak GDP growth around the world, investors are putting a greater emphasis on a company's ability to grow revenues and earnings. While this is a valid strategy, the trade has become overcrowded resulting in valuations that are not warranted even for the fastest growing companies.
- Secondly, as previously mentioned, the global financial markets are in a historic period of time due to ultra-low interest rates and unconventional monetary policies produced by central banks around the globe. This has had a multitude of effects on the equity markets and the valuations of securities. One of the most profound outcomes has been the reach for yield by investors as a result of low interest rates. Investors that historically would have only invested in government or investment grade bonds have been forced to invest in high yield bonds and those high yield bond investors have been forced into the equity markets.

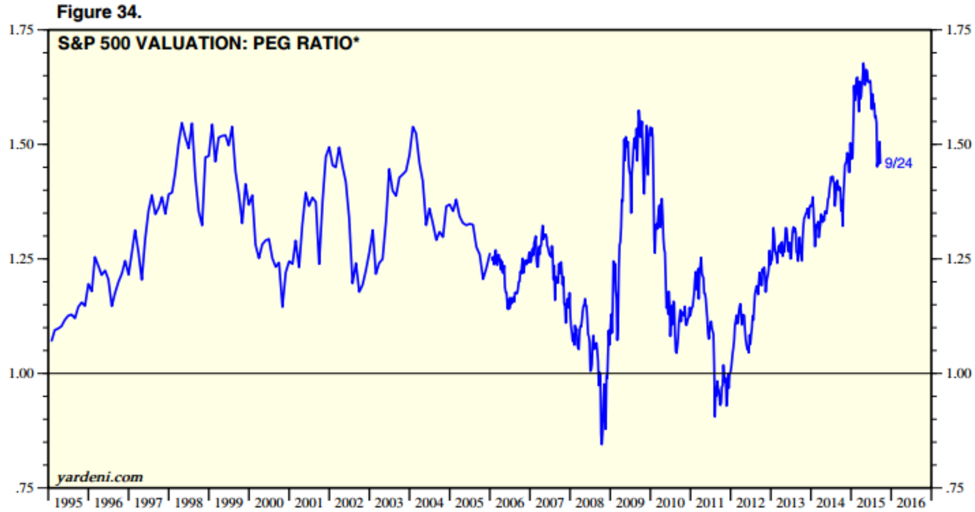
As a whole, investors have been forced further out on the risk curve to obtain a similar amount of return to which they were accustomed prior to the low interest rate policies. The effect has been an increase in valuations across the equity spectrum, which limits the potential returns from stocks, especially those with price multiples above their historic averages. With large portions of the market trading at heightened valuations, investors have placed a greater emphasis on sales and earnings growth.

From a discounted cash flow perspective, the rationale is that these higher growth rates warrant higher current market valuations. Also, because of the low interest rates these future earnings are not as severely discounted as they have historically been. This has led investors to continually push up the valuations of the high growth stocks and shun stocks with reasonable valuations that are experiencing relatively low rates of growth. The problem is that most investors have proven time and time again that they inaccurately estimate future growth rates, therefore overvaluing growth stocks and limiting their future return potential.

What is going to Change the Tide?

This leads us to the final and most important question to answer: What is going to cause the tide to turn and for value stocks to return to their historical outperformance over growth stocks? For one, stocks are becoming increasingly expensive based on a variety of valuation metrics. The PEG ratio, a metric to gauge what investors are willing to pay based on a company's earnings growth, reached its highest level since 1995 in May and is still near all-time highs even after the precipitous drop that markets experienced in August and September.[4] The issue is that these high multiples limit the future return potential of growth stocks and also makes them vulnerable to sharp declines if the growth forecast is lowered or becomes uncertain because of the macro environment. And again, investors have proven themselves to be extremely irrational and poor at estimating future growth rates.

Figure 34.



* Forward P/E divided by LTEG, which is 5-year forward consensus expected annual earnings growth. Monthly through 2005, then weekly.
Source: Thomson Reuters I/B/E/S.

This leads into the second force that has the potential to derail the current performance of growth stocks: uncertainty. Simplistically, a stock's current value is the present value of its future cash flows. When there is an increased amount of uncertainty in the markets and the economy as a

[4] Yardeni Research, Market Briefing: Stock Market Valuation Metrics & Models

whole, it is more difficult to get a comprehensive understanding of these future cash flows. This gives the market reason to decrease the current valuation and pay less for future earnings. One way to quantitatively measure the uncertainty in the marketplace is the Chicago Board Options Exchange Volatility Index, or VIX, which is a popular measure of the implied volatility of S&P 500 index options. Studies have shown growth stocks tend to outperform value stocks in periods of low volatility as measured by the VIX.[5] This helps explain why the divergence between growth and value has been so dramatic these past seven years, as the VIX has been stuck in its lowest range ever. However, since August 2015 the VIX has been increasing and there is more uncertainty in the marketplace as investors try to understand what is going on in the global economy. We do not see this trend of heightened uncertainty ending anytime soon due to China's economy becoming more uncertain, emerging markets struggling with low commodity prices and the possibility of a Fed rate hike in the next couple of months. If the VIX continues to remain high relative to where it has been these past few years, the premise that value will begin to outperform increases.

Finally, an increase in interest rates could be the force that returns value to its historic outperformance over growth. From a discounted cash flow perspective, a growth stock's valuation is a larger beneficiary of low interest rates when compared to value stocks because of how future cash flows are discounted. The higher rate of growth results in a much higher terminal value, which is discounted at a lower rate when interest rates are low. While we do not expect interest rates to rise too much in the near future, any increase has a greater effect on the valuations of growth stocks versus value stocks. The possibility of increased rates compounded with high valuations and heightened uncertainty in the marketplace could lead to mean reversion in the valuation of many of these growth stocks and the return of value outperforming growth.

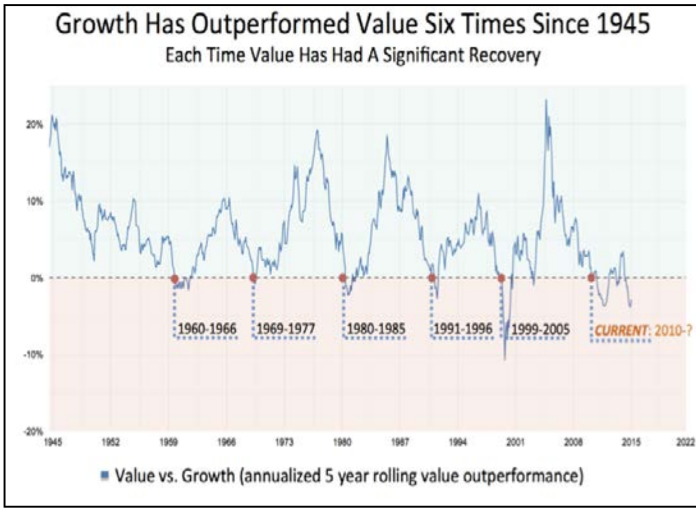
Conclusion

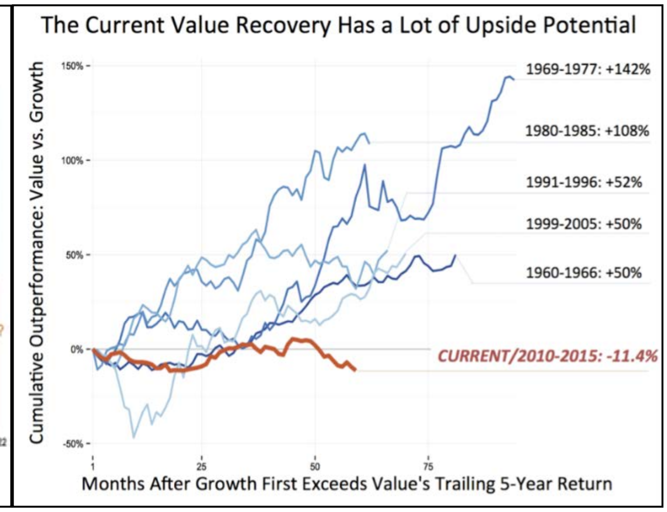
We remain true to our value discipline and have a strong conviction that value will once again outperform growth stocks in the long run. Evidence supports the conclusion that this outperformance by growth is more of an anomaly rather than the norm. Since 1945, there have been only six occurrences, on a trailing five year basis, that the returns of growth stocks have outperformed those of value stocks. Each of these six represented a great opportunity to allocate

---

[5] Lee, Yul W. and Zhiyi Song. "When do Value Stocks Outperform Growth Stocks? Investor Sentiment and Equity Style Rotation Strategies." *EFMA 2003 Helinski Meetings* (2003).

towards value stocks, as the recovery in each instance brought returns that outperformed growth by at least 5000 basis points.[6]





We do not believe this recovery will be any different and in hindsight will represent a contrarian play. While we do not pretend to be market timers, the forces that have the ability to cause the tide to turn towards value are beginning to appear. Valuations are at all-time highs, earnings growth rates are slowing, uncertainty as measured by the VIX is increasing and the possibility for interest rate hikes is still in the cards. Which one of these will be the final straw, is a question we wish we could answer. We do know for certain that it is prudent to observe the current market conditions and historical data and then position one's portfolio accordingly.

Managed Asset Portfolios, LLC Investment Team:

Michael S. Dzialo
Peter J. Swan
Karen M. Culver
John F. Dalton
Zachary S. Fellows

Data has been obtained from sources which we deem reliable but are in no way guaranteed by us as to their accuracy. The information contained herein represents our findings as the date mentioned above. Past performance is no guarantee of future results.

[6] Alberg, John and Michael Seckler. "Why You Should Allocate to Value over Growth." *Advisorperspectives.com*. Euclidean Technologies Management, 11 Aug. 2015.