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VALUE INVESTING: Is It Still Worth the Risk?

(January 25, 2021)

This essay chronicles the recent struggles of value-style investing; explores some possible explanations for its poor recent performance relative to both general market indexes [the S&P 500 in the U.S. and the EAFE foreign stock index] and growth-specific indexes; and reports academic assessments of the future prospects for value investors.

First, however, Some Boring and Confusing Stuff

Although the essay does not contain a comprehensive footnote apparatus, we must acknowledge that it draws upon the following:

- Baruch Lev & Anup Srivastava, "Explaining the Recent Failure of Value Investing," NYU Stern School of Business (October 25, 2019).
- Stephen Penman & Francesco Reggiani, "Fundamentals of Value versus Growth Investing and an Explanation for the Value Trap," Financial Analysts Journal, Vol. 74, No. 4 (2018).
- Shailesh Rana, William H. Bommer & G. Michael Phillips, "Predicting Returns for Growth and Value Stocks: A Forecast Assessment Approach Using Global Asset Pricing Models," International Journal of Economics and Financial Issues Vo. 10, No. 4 (2020), pp. 88-106.
- CFA Digest Summary / CFA Institute Journal Review Vol. 46, No. 4 (April 2016), Rich Wiggins review of Clifford S. Asness, Andrea Frazzini, Ronen Israel, and Tobias Moskowitz, "Fact, Fiction, and Value Investing," Journal of Portfolio Management.
- Ronen Israel, Kristoffer Laursen, & Scott Richardson, "Is (systematic) value investing dead?" (Working Paper), March 14, 2020.
- Marine Monoyer, Forecasting U.S. Value & Growth Stocks Future Performance 2020 Louvain School of Management
- Eugene F. Fama & Kenneth R. French "The Value Premium," Chicago Booth Paper No. 20-01 The University of Chicago January, 2020.
- "An Exceptional Value Premium" Dimensional Research Paper (October 5, 2020).
- Katherine Lynch, Morningstar Direct, July 13, 2020
- Mitchell Miller & Dale Prondzinski, "Value Style Investing Versus Growth Style Investing: Evidence from the 2002-2019 Business Cycle," Journal of Accounting and Finance Vol 20, No. 1 (2020) pp. 131-151.
- Mark Long, "Value investing is struggling to remain relevant," The Economist, November 14, 2020
- "The Value Premium: An Empirical Update," Investment Quarterly, Vol 15., No. 3, Quarter 3, 1999 (Schultz Collins, Inc.).

Most of the above-listed source material is available on the internet—much of it through the Google Scholar search engine.

Further, we must warn readers with the temerity to read the above-listed items, that the academic world is a veritable Tower of Babble when it comes to even the most basic terminology. The vocabulary (read 'jargon') used by one author often differs considerably from that used by another *even when they are talking about the same thing*. 'Value,' which can mean different things in different contexts, is often used as the opposite of 'growth', which, in turn, also has a myriad of different contextual meanings. For example:

- is 'growth' the reward an investor receives over a period of time [e.g., capital gains plus dividends (total return) are the 'growth' element of a portfolio];
- is 'growth' the label assigned to a particular kind of stock [e.g., this stock pays no dividends and future benefits rely solely on a favorable change in its market price];
- is 'growth' the growth in earnings attributable to an increase in a firm's internal cash flow from operations [e.g., an investor in a 'value' stock looks for 'growth' (of earnings)].

Statements found in one author's article such as "growth-style investing is more risky than value-style investing" exist concurrently, with statements in another article such as: "value stocks have risky growth." Although both are contextually correct, their juxtaposition may baffle a casual reader. The informed reader must dig into his or her bag of nouns and adjectives and mentally rewrite the two sentences:

- "Buying a 'growth' stock based merely on a hope for future capital appreciation is a risky—i.e., speculative—proposition;"
- "Buying a 'value' stock based solely on the hope that the company can 'grow' its sales, earnings and free cash flow is a risky proposition."

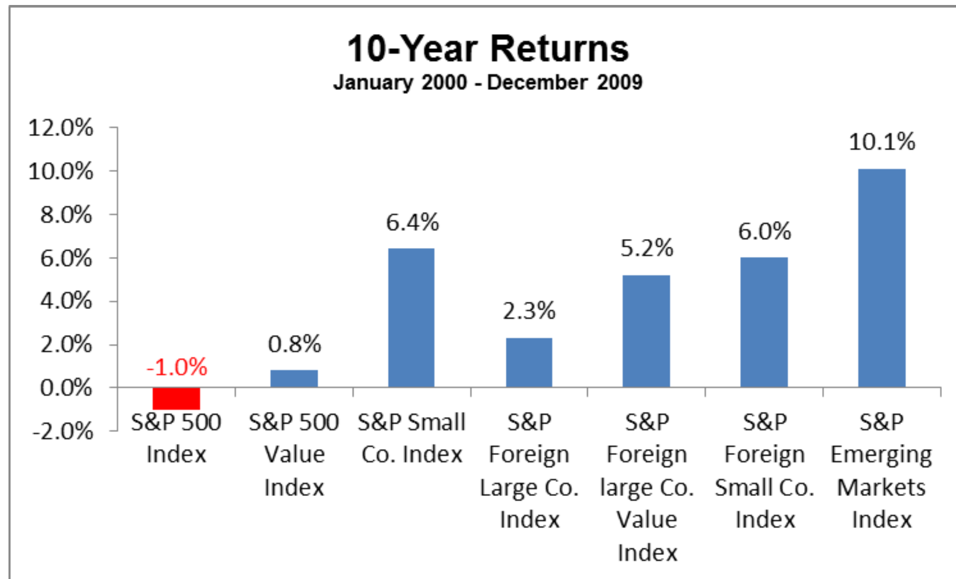
Please, while our rant is in full force, we beg your permission to note the confusion over the term 'value investor.' Consider, for example, the following phrases: "Warren Buffett is a successful 'value investor.'" "Who would not want to own shares in Buffett's Berkshire Hathaway—a value stock?" "Buffett buys stocks that he believes represent good *value*." Although these statements sound like "my stock portfolio has a value-style tilt," or, "my portfolio is diversified over both value and growth asset classes," they are not at all the same. We will not bore you with a long and technical explanation. Suffice it so say, that a case can be made that Buffett is more of an active entrepreneur—buying a firm / recapitalizing it / putting his people on the board of directors / encouraging business transactions with other firms in the Berkshire Hathaway group / leveraging the improved capital structure to finance further acquisitions / etc.—than an investor. Value-style investing, in the context of this essay, means investing through highly diversified indexes constructed according to systematic quantitative rules that are implemented with few discretionary interventions. No concentrated, idiosyncratic, active Buffett-like stock picking allowed.

Setting the Stage: The Parable of the Perplexed Investor

It is January 1, 2010. You have come into some money and have decided to invest in stocks. You like positive returns; but, you dislike prolonged periods of negative returns. Finally, you know that diversification adds both short-and long-term stability to your portfolio. Although a diversified

portfolio's return will never equal or exceed the return from the top performing investment, it will never exhibit bottom-of-the-barrel returns, either. Perhaps you should set up a diversified portfolio and stick with it through market ups and downs ["Bulls make money, Bears make money, Pigs get slaughtered"].

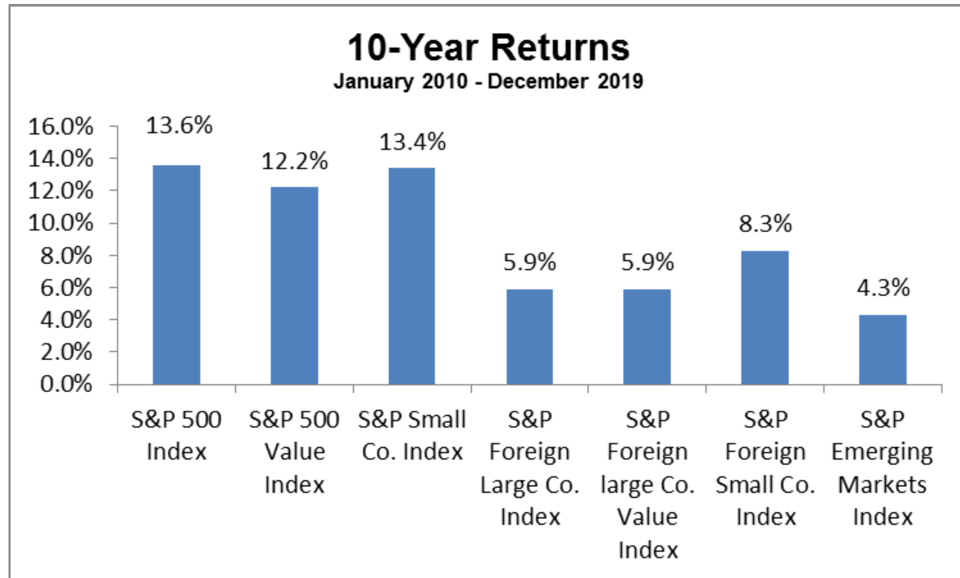
What investments should you consider? How have various global stock markets performed over a meaningful period of time—e.g., the last 10 years: January 1, 2000 through December 31, 2009? Here are the data with which you are presented by Morningstar:



How will you construct the portfolio: give equal weight to each asset class? Weight the better-performing market indexes more heavily than the lagging indexes? After noting that investors suffered through 10-years of market volatility with only a negative reward **[-1.0%]** to show for their troubles, would you give a zero-percent weighting to the index? If you were an individual investor or a trustee investing someone else's money, could you justify including anything more than a miniscule allocation to the S&P 500? Certainly, 10 years seems like a sufficient amount of time [120 monthly data points] upon which to make a statistically sound and defensible portfolio allocation decision. What do you do?

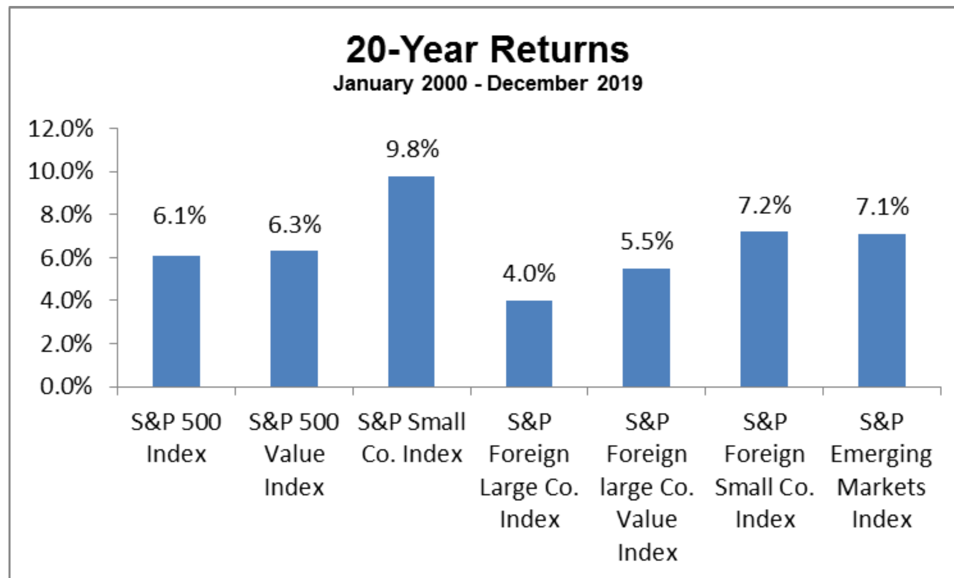
It is now ten-years later (December 31, 2019). What did you decide? Did you underweight U.S. investments and double-down on emerging markets? If this is the case, you might have fallen victim to a common investment mistake called "recency bias"—a tendency to extrapolate (i.e., assign greater importance to) the most recent results when planning for the future. Such a bias motivates investors to dump recent losers and load up on recent winners. To what extent were you tempted by recency bias? [News flash—everyone is tempted!]

Here is a graph of investment results provided by Morningstar:



It seems as if the investment gods are fickle. The trustee having decided to avoid an investment with a demonstrated 10-year losing track record—i.e., the S&P 500—is now facing suit for fiduciary breach for (1) failure to diversify [“A trustee shall diversify the investments of the trust unless the trustee reasonably determines that, because of special circumstances, the purposes of the trust are better served without diversifying.” *Uniform Prudent Investor Act* §3]; and (2) evaluating investments in isolation rather than in a portfolio context [“A trustee's investment and management decisions respecting individual assets must be evaluated not in isolation but in the context of the trust portfolio as a whole and as a part of an overall investment strategy having risk and return objectives reasonably suited to the trust” *Uniform Prudent Investor Act* §2(b)]. For the individual investor not subject to trust law, they are mad at the poor performance of the portfolio. Bottom line: a prudent investor never wants to dump (or, avoid) an investment before determining its role in the aggregate portfolio. Portfolio construction is not treasure hunting; rather, it is about avoiding a catastrophe

Just to complete our parable of the perplexed investor, we present the combined results over the full twenty-year period (2000-2019):



Based on the expanded data set, what portfolio allocation weight would you assign to individual investments for the next ten years? If you decide that it is prudent to dump Large Company Foreign Stocks and transfer the money into U.S. Small Company Stocks, you should never volunteer to be a trustee!

What's 'Growth' / What's 'Value'?

A 'growth-style' index invests in companies the share prices of which are expected to grow faster than the market's average growth rate. These shares usually pay little or no dividends because a growth company reinvests profits to promote future growth. In addition to an extremely low dividend yield, growth stocks generally exhibit high share prices [they can appear to be expensive], high price-appreciation targets by stock analysts, high price relative to the company's book value [Price-To-Book ratio , or P/B], and low Earnings-per-Share Price ratio [E/P, or the inverse of the well-known Price-to-Earnings ratio].

A 'value-style' index, by contrast, invests in companies the share prices of which are expected to grow slower than the market's average growth rate. These shares usually pay higher dividend yields because they are generally more mature companies. Additionally, they often exhibit a low Price-to-Book ratio, a low Price-to-Earnings ratio which leads many investors to label these stocks as "cheap".

Rather than undertaking a foray into the world of accounting ratios, we suspect that an example provides a more readily understood explanation. The following example, taken from the 2020 paper authored by Israel, Laursen, and Richardson, compares a value stock with a growth stock in the restaurant business [Consumer Discretionary Sector]. In this case, a value stock (Starbucks Corporation) is compared to a growth stock (Chipotle Mexican Grill) based on market and accounting data as of December 31, 2019.

The authors decompose the data into five elements:

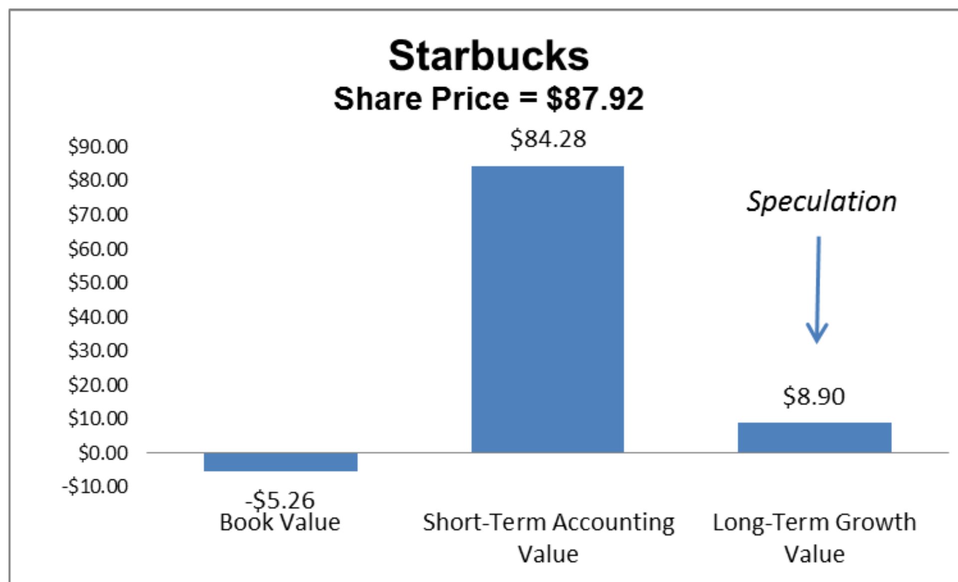
1. Each firm's Share Price;
2. Each firm's Book Value—a number taken directly from the company's balance sheet;
3. Each firm's short-term projected income taken from analyst forecasts for the next two years;
4. Each firm's projected dividend for the next two years, and,

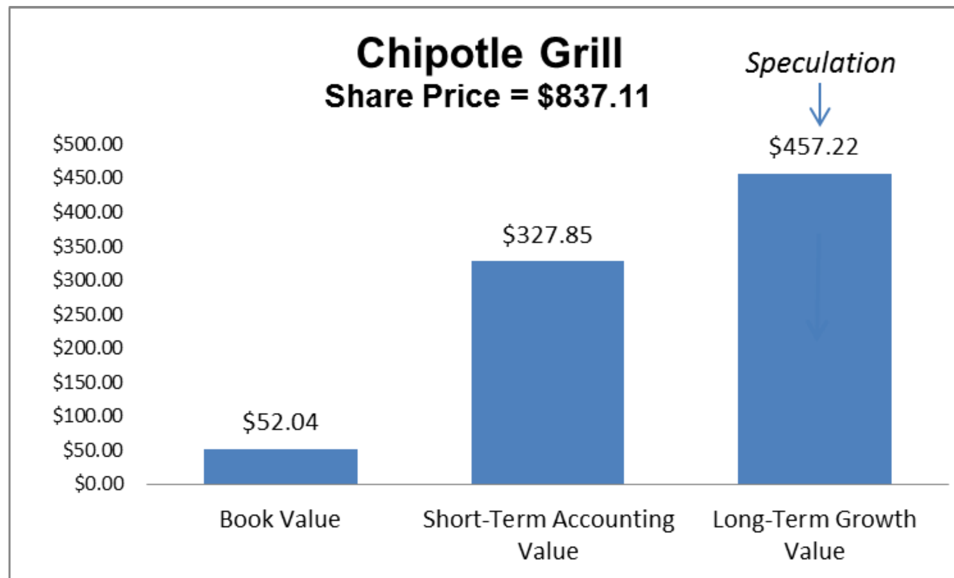
5. Each firm's long-term dividend and earnings forecasts.

Elements one and two are current observables; elements three and four are relatively reliable short-term projections (always subject to unexpected shocks); element five is labelled "speculation" by the authors because of (1) the greater variance in analyst forecasts, (2) uncertainty in discount rate assumptions, and (3) non-market risks (you may remember the e-coli problem for the Chipotle Grill chain).

Book value is a very rough estimate of a firm's liquidation value—if a firm goes out of business what is the value of current assets available to pay the shareholders. Short-term earnings and dividends are near-term components of stock value that are estimates with an expected low error term. Projections are based on close analysis of a firm's near-term net earnings from operations. Beyond two years, projections become more "dicey;" and the authors apply the label 'speculation' to this component of a stock's current price. Speculation is a hope that the firm's current business strategies will generate revenues sufficient to cause an increase in the long-term share price.

Here is a graphic depiction of each company's stock:





Although Starbucks has a high Price-to-Book ratio,[1] nevertheless it is a 'value' stock due to the relatively low amount of speculation in the share price. By contrast, the price of Chipotle Grill stock has speculation as a major component of its stock price. If future capital appreciation fails to materialize for Starbucks stockholders, the damage is minimal; if projected growth expectations do not materialize for Chipotle Grill, the share price will take a much greater hit. It is the speculation component of price that is especially risky. A value investor deliberately avoids stocks when their current price has a large speculation component. A value-style investor seeks 'fundamental value' which is defined as the expectation of receiving benefits sooner rather than later because short-term earnings and dividends are major components of share price.

The Market's Going Up, Why Haven't I Made Money?

We suspect this is a more interesting question for investors. If we look at the issue more closely, we note that two things are going on:

The Reference Index Problem

When assessing the performance of equities (stocks), many investors are accustomed to refer to the Dow Jones Industrial Stock Index [30 stocks], the S&P 500 Stock Index [if you can figure out who is buried in Grant's tomb, you know the number of stocks in the S&P 500], or the NASDAQ stock index [approximately 2,660 stocks listed on the NASDAQ exchange]. The total number of U.S. publicly-listed securities is approximately 6,000 although many companies are too small to warrant listing on a major trading exchange. International diversification generally encompasses portfolios with large-cap foreign stocks. For example, the Europe, Australia and Far-East Index [EAFE] includes approximately 900 companies; the S&P International Small-Cap Index currently exceeds 2,600 holdings. Thus, the three

[1] Starbucks has a negative book value because the company borrowed heavily to finance a multi-year sequence of share buy-backs. The stock is highly leveraged which presents a risk that differs from the risk quantified in the 'speculation' component. The moral of the story—there is more than one 'flavor' of value stock, and ratios must be evaluated in tandem across multiple metrics prior to making a final growth/value classification.

most commonly used reference indexes [Dow Jones, S&P 500, and NASDAQ] comprise only a fraction of the total stock exposure of most globally diversified portfolios.

Both the S&P 500 and the NASDAQ have a large weighting in business services (software), pharmaceuticals (biotech), and electronics (computers). The Dow Jones, by contrast, gives greater weight to companies in market sectors such as banks, transportation, insurance, and retailers.[2] Here are the scorecards for the 1-year period ending November 30th 2020:

Dow Jones: 8.09%
S&P 500: 17.46%
NASDAQ: 42.06%

The NASDAQ, given its heavy weighting towards "growth sectors," evidences better than a five-to-one outperformance relative to the Dow; the S&P 500 evidences better than a two-to-one outperformance. Interestingly, the one-year performance of the New York Stock Exchange [NYSE] Composite Index (approximately 2,000 stocks) is approximately 6.0% as of November 30th. Here's the point—although the NYSE Composite is more representative of the overall performance of the U.S. equity markets than the Dow, the S&P 500 or the NASDAQ, investors see, in the popular press and TV, only the returns from above-listed three indexes.

Questions: At this time, do you think it is prudent to invest most or all of your portfolio in the tech-heavy NASDAQ? Are we in a 'New Paradigm" economy? What could go wrong?

Recent Underperformance of Value-Style Investing relative to Growth-Style Investing

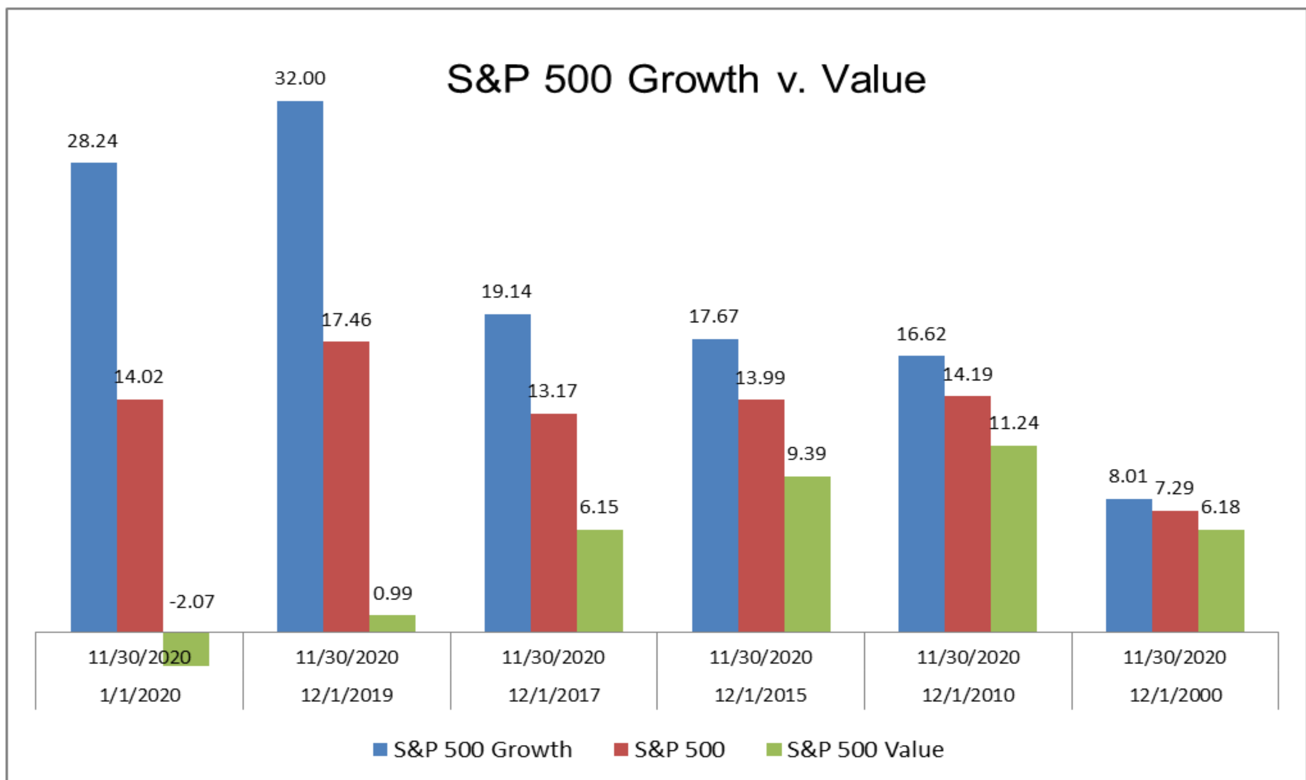
In this section, we document the recent under-performance of value stocks relative to growth stocks. In the next section(s) we address possible reasons for the underperformance; and, most importantly, possible future investment implications. We look at three indexes across various capital markets:

- A growth stock index;
- A general market index; and,
- A value stock index.

For example, the S&P 500 growth index consists of only the subset of growth stocks in the S&P 500; the S&P 500 Value index is only the subset of S&P 500 stocks that are value stocks; and, finally, the S&P 500 index combines both the growth and value subsets. Currently, the proportion of growth stocks in the S&P 500 is approximately 70%, the proportion of value stocks is approximately 30%--the S&P 500 has a significant growth-stock tilt.

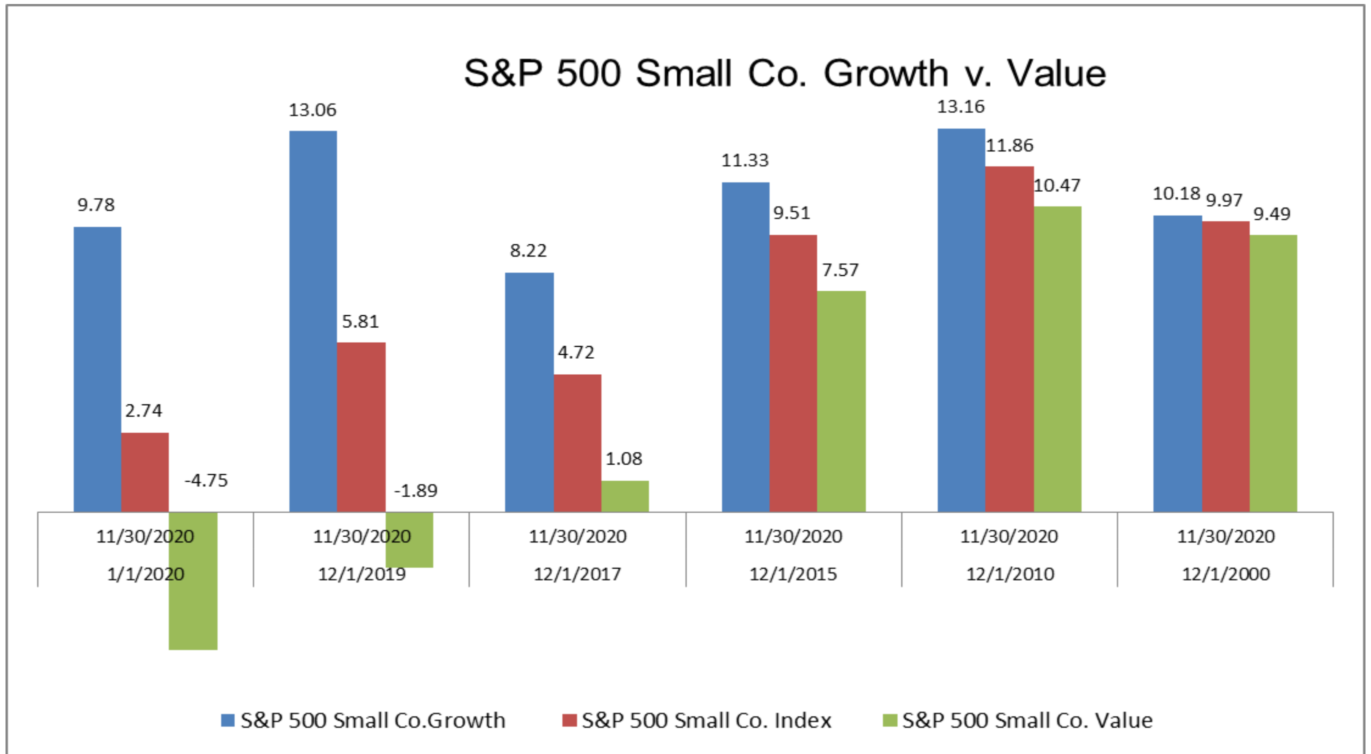
[2] The Dow is a price-weighted index which includes Boeing, Procter & Gamble, Chevron, Caterpillar, Travelers, VISA, Goldman Sachs, IBM, American Express, Walmart, and McDonalds. Price-weighting means that a company like Goldman Sachs with a share price of approximately $240 has much greater influence on the index's performance than does Coca-Cola with a share price of approximately $53. This is not the case for the S&P or NASDAQ which weight returns by market value—i.e., Coke is a bigger company [$84 billion] than Goldman Sachs [$64 billion] and, therefore, has a greater influence on index performance.

Based on data provided by Morningstar, here is a graphical representation of returns over selected periods ranging from December 1, 2000 through November 30, 2020. Over the last 20 years, the return differential has not been particularly striking. The S&P Value index generated a 6.18% return, the S&P 500 index generated a 7.27% return, and the S&P Growth index generated an 8.01% return. However, the return differential over the past year [12/1/2019 to 11/30/2020] is massive: 0.99% for the S&P Value index; 17.46% for the S&P 500; 32% for the S&P Growth index. This trend continues into the year-to-date returns for 2020: **-2.07** for Value, 14.02% for the S&P 500, and 28.24% for Growth. Over the past year, Apple and Netflix trounced Caterpillar Tractor and Chevron. The recent results reverberate back through time and give a longer-term edge to growth stocks in the large-company U.S. market.[3]

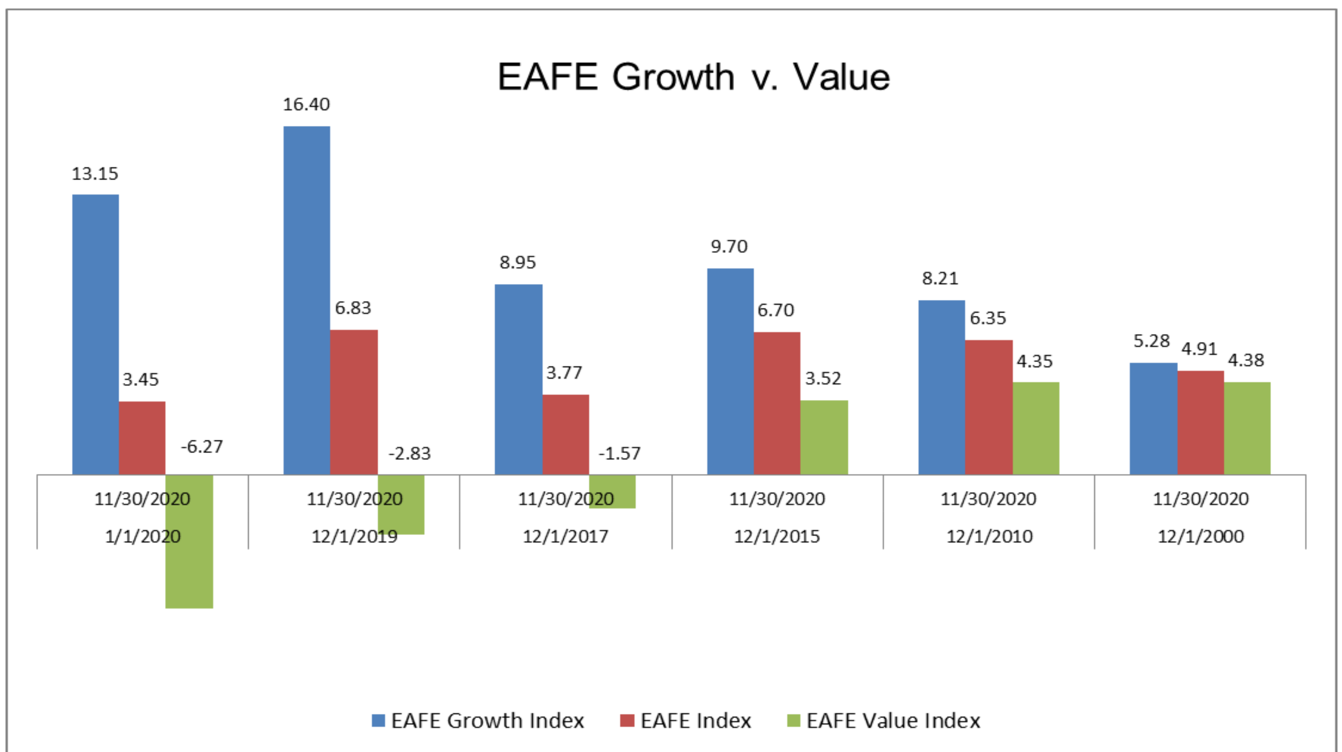


A similar, although not as extreme, pattern holds for the U.S. Small Company market:

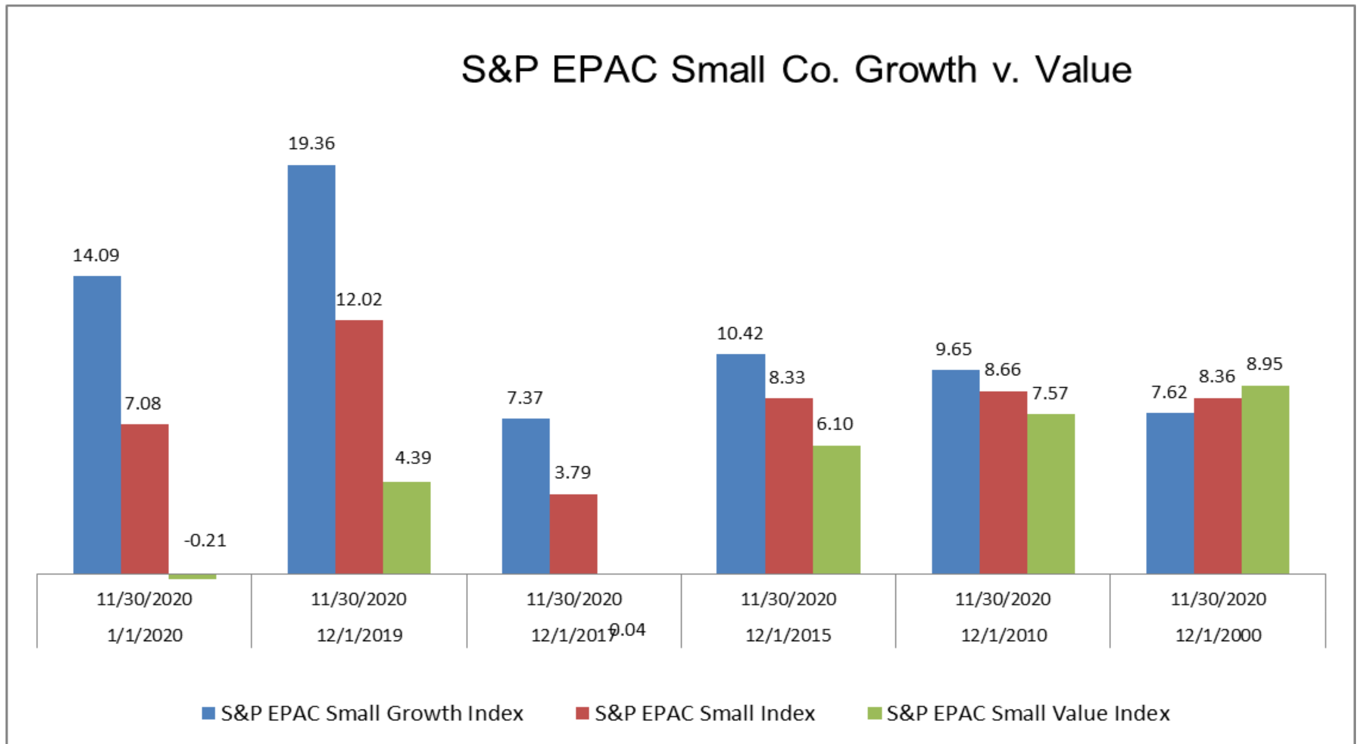
[3] At this point it is worth remembering that the S&P 500's return for the first decade of the 21st century (January 2000 through December 2009) was **-1.0%**. All data is provided by Morningstar and for illustrative purposes only



And for large company foreign stocks as proxied by the return of the EAFE index:



The pattern differs somewhat, however, for foreign small company returns as proxied by the S&P Europe, and Asian Pacific Countries Index [EPAC].



In this case, value stocks exhibit higher long-term performance results.

The multi-period performance graphs prompt two observations:

1. The 'leveling-out' of returns over longer time intervals (also called "reversion to the mean") suggests to many economists that long-term averages are the best predictor of expected future performance.
2. Although both growth and value stocks exhibit significant volatility, they do not move in lockstep—i.e., they are not perfectly correlated. In recent periods, they have sometimes been negatively correlated—a statistical property useful for portfolio risk control.

The next section develops these observations a bit further.

Why did this Happen?

Not only were the last one-and three-year returns to value-style investing statistical outliers, they were the 'mother-of-all-outliers.' Throughout the entire data series of U.S. stock returns dating back, in many cases, to 1928, there has never been a one/three year period of relative underperformance. In fact, the long-term return series shows a significant advantage to value-style investing relative to growth-style investing.[4]

[4] From January 1928 through the end of the 3rd quarter of 2020, U.S. value stocks have outperformed U.S. growth stocks by 4.54% annually. All data is from Morningstar and for illustrative purposes only.

The reason(s) for the recent underperformance of value-style investing has proven to be 'grist for the academic publishing mill.' There is an enduring quest to determine what "factors" (market-related, economy-related, accounting-related, behaviorally-related, etc.) drive stock returns. A recent review of academic research identifies 316 different factors proposed by economists seeking to develop explanatory models.[5] The 316 factors, for the most part, are derived from close examination of U.S. data. When global markets are included in the mix, the power of any one factor (or combination of factors) diminishes significantly. Suffice it to say that, to-date, attempts to predict stock returns make weather forecasting look like an exact science.

Among the [many] recent "explanations" for value-style under-performance are:

- The increase in share buy-back programs has changed the nature of key accounting metrics such as the book-to-market ratio. This factor, although historically significant, is no longer an adequate metric for identifying fundamental value.
- Value investing focuses on assessments of a firm's current operations and its ability to generate free cash flow. However, the growing importance of firm investments in "intangibles" such as research & development projects, distorts the traditional evaluation of fundamentals because U.S. accounting regulations require R&D outlays to be expensed as costs rather than capitalized as assets—i.e., added to book value.
- Quantitative-driven investment systems have largely removed the bias against purchasing cheap, out-of-favor stocks for which there is little current demand. Historically, many institutional investment committees have avoided pedestrian value stocks in favor of more glamorous growth stocks. By including a large portion of value stocks in institutional portfolios, investment committee members assumed both investment risk and 'loss-of-your-job-because-you-picked-lousy-stocks' risk; and,
- The historical advantage of value-style investing has evaporated because the majority of investors are 'hip to the game.' Trading activity in value stocks increased to the point at which trades became 'crowded' and the value-stock advantage disappeared.

The above-listed "explanations" exist against the more-recent backdrop of the Covid-19 shock to the global economy. Growth stocks were given a strong boost by the necessity to marshal technology for at-home work requirements, and for pharmaceutical / biotech research such as DNA sequencing and vaccine development. At the same time, the economic slowdown depressed prices of many value stocks in the energy, consumer, transportation, food, and financial sectors.

A detailed analysis of academic theories is well beyond the scope of this essay. Our survey of the academic landscape shows little consensus on the "why" of recent value-style underperformance. The diligent reader can find true-believers and skeptics for most every academic proposition and supposition.

[5] Models using several factors are 'multi-factor models.' In order to achieve mathematical tractability, most models restrict themselves to between two and eight factors. Models restricting themselves primarily to market / accounting factors are 'asset pricing models;' models restricting themselves primarily to macro-economic factors are 'arbitrage-pricing theory models.' In a regression analysis of both asset pricing factors and macro-economic factors—23 in all, Vanguard found that the combination of factors could "explain" only approximately 23% of *historical* results. Good luck predicting the future!

Will it Continue?

What about the future? While there is a paucity of consensus opinion, many commentators suggest:
Investing in Value Stocks is a risky proposition. Value stocks are "cheap" for good reason. The risk of value stocks is the risk of financial distress. Many value stocks are located in currently depressed sectors which may be subject to more downside pricing pressures, and, in a severe recession, to heightened bankruptcy risk. This is the single best reason why a prudent investor would not seek to own merely a handful of such stocks; but, rather, owns a broad index of hundreds of such firms. Some firms will continue to do poorly and some will evidence spectacular upside moves.
Investing in Growth Stocks is a risky proposition. Growth stock investing is successful only if projections of long-term capital appreciation are met. Speculation on future share price increase may direct an investor's attention to the "story" behind the glamor-stock's success rather than to the fundamental value currently embedded in the firm's current operations. Future share price appreciation is risky because, for many firms, it is unlikely to be realized. This is the single best reason why a prudent investor would not seek to own merely a handful of such stocks; but, rather, owns a broad index of hundreds of such firms.
Investing in Value Stocks is an attractive proposition. One can find a host of reasons why value stocks may be poised for a dramatic comeback. The recent rise in home prices and home sales should create strong demand in a variety of consumer sectors traditionally considered to be value-stock sectors. The taxation of multi-national firms, the willingness of global central banks to stimulate the economy, the rise of economic activity—including massive infrastructure spending—in the third-world, the imminent arrival of the Covid vaccine with the subsequent restoration of travel & leisure activities, promise to reward value-style investors.
Investing in Growth Stocks is an attractive proposition. The restructuring of the workplace with the emphasis on the ability to work remotely, should continue to fuel continued price appreciation for growth stocks. The long-term business trend appears to be a movement from an asset-based economy favoring value-style investing to a service and information-based economy favoring growth stocks.

A List of (almost) consensus opinions

Value-and growth-styles are complementary. They encapsulate different types of risk; and, therefore, provide valuable diversification benefits when both are owned in an investment portfolio. The historical evidence permits us to make the following observations:

1. The expected risk premiums (return of the value subset minus return of the general market / return of the growth subset minus return of the general market) tend to move in opposite directions. ["Every dog has its day."]
2. Global markets tend to go through cycles of varying length that favor either growth or value strategies. Global diversification is important because, from country-to-country, the cycles are not in sync. Additionally, it has proven difficult (*impossible*) to predict the onset, termination, or duration of pro-growth or pro-value market cycles.
3. Investors who grew up during the depression or who entered the job market during a severe recession are comfortable owning value stocks given their emphasis on "fundamental value" from the continuing operations of the firm. By contrast, investors focused on a firm's growth

opportunities, are comfortable owning growth stocks even if a firm is not currently profitable. Value-style investing is tethered to concrete accounting statement data; growth-style investing relies on forward-looking valuations supported by prospects of future success.

4. Market history supports the notions that long-term investing favors value-style investing; but, that investors should also mix growth stocks into the portfolio for risk control, and that they should avoid a switching strategy ("is now the time for value stocks?") because poor timing could be fatal to realized returns.

In conclusion, the stage may be set for a strong comeback to value stocks; or, value stocks may be "trapped" in dying firms that will become the sewing machine and typewriter companies of the future. Growth stocks may flourish in a "new paradigm" economy; or, they may become the dot.coms or the "Nifty-Fifty" of the future. Care to place your bet?