DISTILLATE CAPITAL

Equity & Bond Valuations & Inflation

Introduction

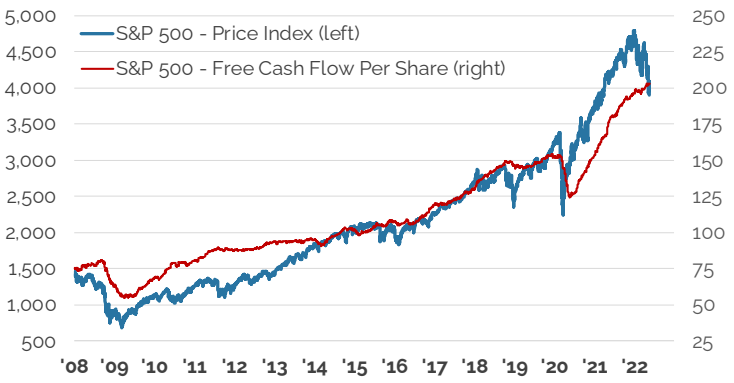
Uncertainty about the future path of inflation is generating many questions for many investors. Stocks have sold off sharply and bonds alongside them with yields now much higher. The question of absolute as well as relative attractiveness is more relevant than perhaps it has been in some time. We thought it was therefore an opportune time to examine again the relationship between bond and equity yields and put some perspective on the opportunity the current pricing environment makes available.

We have broken the analysis into three sections. First, we look at current equity valuations, the components of returns, and what history suggests about future returns. Next, we examine the history of equity free cash flow yields versus bond yields and the logic of this relationship. Lastly, we consider the implication of higher inflation on equity returns.

As many of you appreciate, we prefer to look at valuations based on free cash flow, measured by cash remaining after all expenses and investments are accounted for, regardless of whether they are research and development, marketing, or capital expenditures. We have written extensively about the accounting distortions brought by the economic evolution to a capital-light economy and how this has made traditional metrics like price-to-earnings (P/E) or price-to-book (P/B) less meaningful (for greater detail, see our paper: "*Value Investing in a Capital-Light World*"). To avoid inconsistencies, we measure equity valuations utilizing free cash flow as it is unaffected by this shift and is at the heart of a fundamental tenet that the value of an asset is the present value of its future free cash flows. We look at both estimates of future free cash flow, since the market is forward looking, as well as trailing actual figures where a longer history can be useful in periods of economic transition if forward estimates risk being overly optimistic. Free cash flows also have the advantage of being more stable, which we address later and highlight in **Figure 9**.

Estimated equity free cash flows have held up while prices have corrected.

Figure 1: S&P 500 Price vs. Free Cash Flow on Next Twelve-Month (NTM) Consensus Estimates



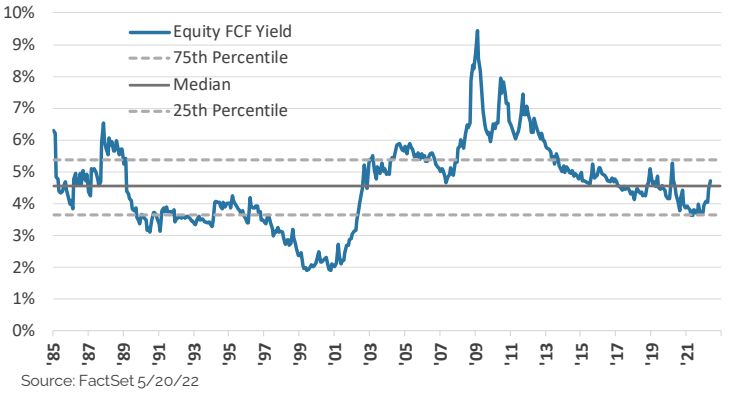
Source: FactSet 5/20/22

Equity Free Cash Flows & Returns

Amid the recent market turmoil, equity fundamentals, as measured by consensus-estimated next-twelve-month free cash flows (NTM), have held up well (see **Figure 1**). Paired with declining prices, the valuation opportunity has improved and the free cash flow (FCF) yield on the S&P 500 on this measure is now 5.2%. Using the longer-term data on trailing-twelve-month (TTM) free cash flows, the S&P 500 FCF yield is 4.7% and slightly above the median of where it has traded since cash flow data first became available with accounting rule changes in the mid-1980s (see **Figure 2**). What does the current free cash flow yield tell us about potential prospective returns?

The trailing equity free cash yield is just above its historic median level.

Figure 2: Trailing S&P 500 Free Cash Yield

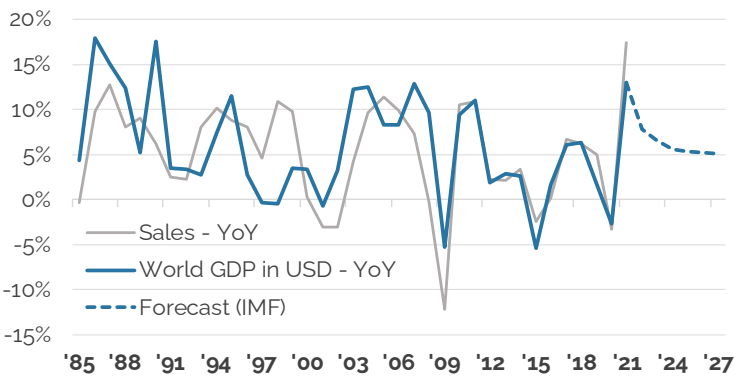


Source: FactSet 5/20/22

Unlike bonds, the total return in equities is a function of both the initial FCF yield, but also how much the cash flows that underpin that yield grow over time. From 1985 through 2021, equity free cash flows per share grew at an annualized rate of just over 9%. That growth is a function of two key components. First, there is sales growth. Sales growth tends to track nominal world GDP growth in U.S. dollars, which makes sense given the global nature of the constituents of the market (see **Figure 3**).

S&P 500 sales track nominal GDP in U.S. dollars.

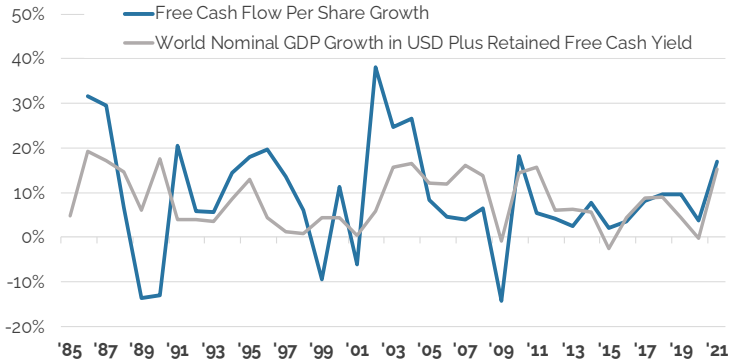
Figure 3: S&P 500 Sales vs. Nominal World GDP in USD



Source: FactSet 5/20/22

S&P 500 free cash flow per share growth closely tracks the combination of world nominal sales growth plus the retained free cash yield.

Figure 4: S&P 500 Free Cash Flow Per Share Growth vs. World GDP Growth Plus the Retained Free Cash Yield



Source: FactSet 5/20/22

The second component of free cash flow growth is the amount stemming from free cash flow that is reinvested each year. Free cash flows are defined as what is left after all spending, including investments in research and development, advertising, capital expenditures, etc., are deducted from revenues. Those investments generate current and future sales, but the free cash flows that remain can also be applied toward future growth. A portion of free cash flows are typically paid as dividends, but the free cash flow that is retained can be reinvested to boost growth through acquisitions or share repurchases. If this retained free cash flow is calculated as a yield against share prices and then added to world nominal GDP growth from the previous chart, the sum is a rough proxy for free cash flow growth per share. This summation has in fact tracked actual free cash flow per share growth relatively well (see **Figure 4**).

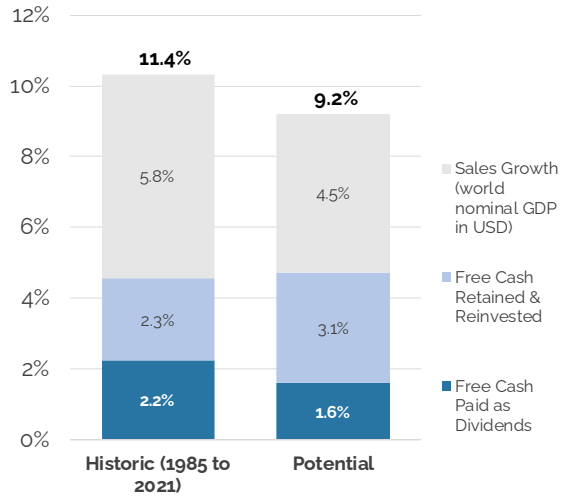
Alternatively, we can examine the averages of each component of per share free cash flow growth along with dividends over the entire 1985 to 2021 period. **Figure 5** shows that the trailing free cash flow yield averaged 4.5% over the period, with 2.2% paid as dividends and the other 2.3% retained. Adding world nominal sales growth of 5.8% to the 2.3% retained yield equates to an estimated growth rate of 8.1%, a rate that reasonably closely matches the actual free cash flow growth of 9% over this period. Adding back dividends gets to a combined equity returns of 11.4%, which again roughly matches the actual annualized total returns of 11.9% over the period.

Using the same sources of returns it is possible to theorize what potential future returns might be based on the starting equity free cash flow yield and some estimate of nominal world GDP growth. The current equity free cash flow yield of 4.7% is split between the current 1.6% dividend yield and 3.1% retained in free cash flow. Add to this an estimate of nominal world GDP growth of 4.5%, below the IMF-predicted 5%, and roughly reflecting 2% real GDP growth and 2.5% inflation, and you arrive at a potential return of about 9% going forward. While GDP growth in U.S. dollars could be more or less, especially given different inflation scenarios which we will discuss later, the combined elements produce a potential return not that different than the long-term historic return in equites.

This suggests that equities are not as egregiously expensive as some have suggested, especially after the recent pullback. Crucially, while the GDP estimate is an unknown, it is the relatively attractive 4.7% starting free cash yield that supports much of the return potential.

Sources of historic and potential equity returns result from the dividend yield paid from free cash flows, retained free cash, and sales growth.

Figure 5: Historic & Potential Sources of Equity Returns

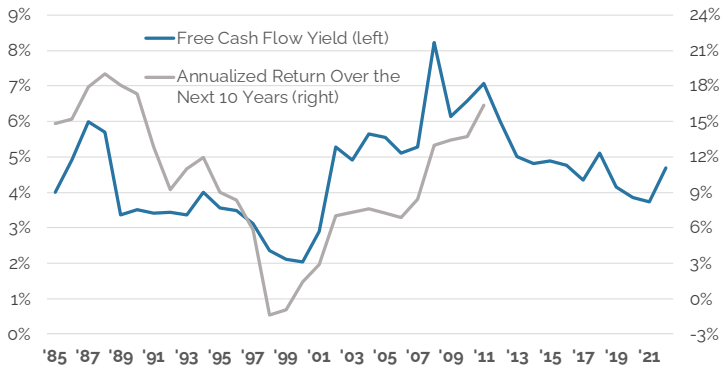


Source: Distillate Capital, FactSet 5/20/'22

While the starting equity free cash flow yield is not as big a driver of returns as would be the case with bonds, we would still expect to see a fairly strong relationship between the trailing equity free cash flow yield and forward returns over a longer period, which inherently smooths out some of the shorter-term fluctuations in prices. **Figure 6** depicts exactly that relationship. While the starting free cash yield and the total return for the S&P 500 over the ensuing 10 years is not exact, there is a reasonable fit. The relationship suggests that the current 4.7% trailing free cash flow yield would now equate to an annualized return of over 10%, slightly higher than the 9% we estimated in **Figure 6**, but again entirely consistent with the long-term returns earned in equities.

The starting equity free cash yield offers a good rough guide for returns over the next 10 years.

Figure 6: S&P 500 Trailing Free Cash Yield vs. Total Return Over the Next Decade



Source: FactSet 5/20/'22

Equities vs. Bonds

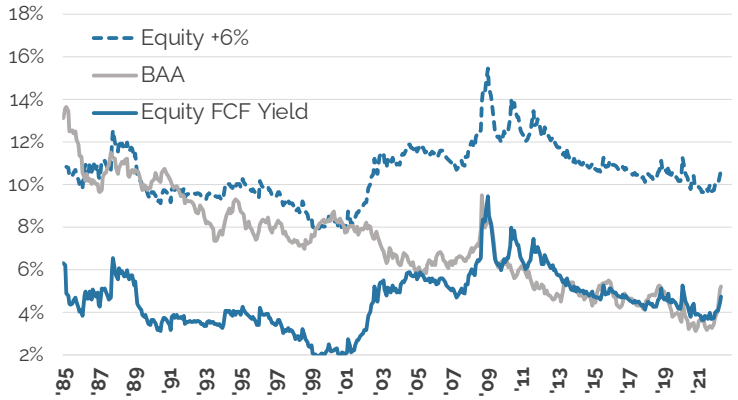
While equities look reasonably valued from a historical perspective, what about in relation to bonds? Over the most recent twenty-year period, the equity free cash flow yield traded very tightly with BAA-bond yields, and both have moved higher in lock step in recent months. But over the longer-term, this relationship did not always hold, and the equity free cash flow yield traded at a significant discount to the BAA-bond yield (see **Figure 7**). In considering current valuations, as well as possible return scenarios under different inflationary environments, is it useful to examine the logic around whether the equity free cash flow yield should trade at the same level as the BAA-yield, as it does currently, or whether it should trade at a discount as was the case in the past.

While equity returns are a function of both their starting yield and growth, for bonds held to maturity, returns are almost entirely a function of the starting yield less some loss rate. For BAA bonds this loss rate, adjusted for recoveries, has averaged around 0.3% per year.

What does this mean for the equity yield relationship vs. the BAA yield? The prior figures show that the equity return is a function of the equity yield plus sales growth, historically about 6%, tracking world nominal GDP. If investors demanded a similar risk premium to hold equities as BAA bonds, we would then expect equities to trade at a 6-percentage point discount to the BAA yield instead of trading in line with it. This is exactly where the equity free cash yield traded in relation to the BAA yield from 1985 to about 2000. This is also shown in **Figure 7**, which simply adds to the analysis a line depicting the 6% historic sales growth rate added to the starting equity free cash yield. The relationship began to change around 2000, however, when the equity yield converged to the BAA yield, indicating that equities either no longer reflected a growth benefit, which seems unlikely given ongoing expansion in the world economy, or that the risk premium to hold equities suddenly surged, possibly as a result of tumultuous price moves, as we suggested in our *Asset Class Yields* paper.

Equity free cash yields are at similar levels as BAA yields at present, but previously traded at a substantial discount reflecting their growth benefit.

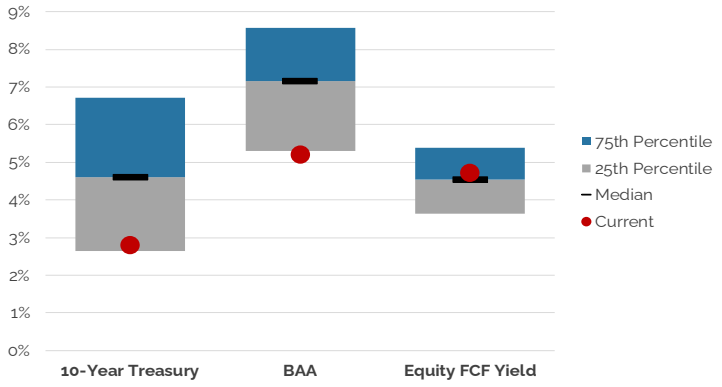
Figure 7: BAA Yield vs. S&P 500 Free Cash Flow Yield on Rolling Last Twelve Month (LTM) Data



Source: FactSet, Standard & Poor's 5/20/22

Equities look better valued relative to their own history than do bonds.

Figure 8: Current Valuation Rank vs. History ('85 to '22)



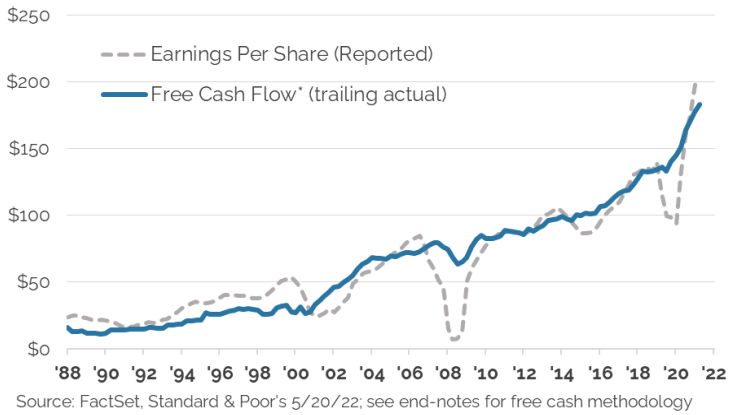
Source: FactSet, Standard & Poor's 5/19/22

Regardless the cause for the convergence in yields, equity valuations at present remain more attractive in relation to bonds than they have been in the past and the growth potential does not appear to be reflected in current equity prices as compared to BAA yields. Another way to see this is to look at the percentile valuation ranks for 10-year treasuries, BAA-bonds, and equities in **Figure 8**. This highlights that while equities rank just above their median valuation, 10-year treasuries are around the 25th percentile and BAA-bonds are just below this level.

A counterargument to the attractive relative valuation of equities is the risk that equity free cash flows will decline precipitously even though forward estimates have held up so far (as noted in **Figure 1**). While slower economic growth seems very likely amid tighter monetary conditions and a recession is very possible, equity free cash flows tend to be much more stable than earnings due to both accounting issues as well as the fact that companies can reduce certain investments to support free cash flows in periods of economic distress. This relative stability of free cash flows is evident in **Figure 9** and along with the accounting issues noted earlier, is yet another reason we prefer to use free cash flows in making valuation assessments.

Equity free cash flows tend to be fairly stable (and much more so than earnings) even through periods of economic distress.

Figure 9: Equity Free Cash Flows vs. Earnings Per Share Over Time



Source: FactSet, Standard & Poor's 5/20/22; see end-notes for free cash methodology

Inflation

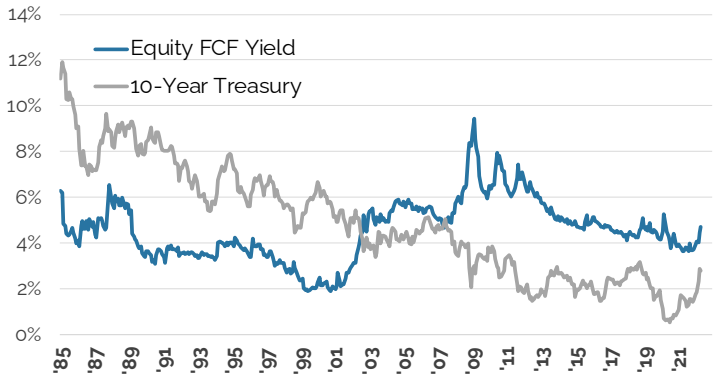
Inflation is difficult to measure and its persistence from this point forward is heavily debated. In terms of our own view, we prefer to follow the advice of Yogi Berra, that "it's tough to make predictions, especially about the future." There is clearly a wide array of inflation scenarios, and we are not dogmatically expecting one over the other. Looking at embedded market-measures of expected 10-year forward inflation, for what they are worth, suggests a somewhat more elevated average annual rate of 2.6% based on current Treasury Inflation-Protected Security (TIPS) yields. On the other hand, it was only a few years ago that McKinsey (and many others) were more worried about massive unemployment and deflationary forces due to automation (*McKinsey report*). Again, we will defer to Yogi.

Though we do not know what inflation will look like, we can assess current valuations to help us think through different investment outcomes in the future. Going back to the simple equity return build-up (**Figure 5**), we can increase our inflation assumption from 2.5% to 5%. Since equity free cash flows track nominal GDP, you would expect the nominal growth rate of equity free cash flows to increase. The ability of companies to generally pass along higher input costs with higher prices is a key benefit of owning equities.

Offsetting this higher nominal growth, however, is the potential that the equity valuation could deteriorate. While it is possible that higher inflation and higher bond rates would push equity free cash yields up commensurately, this is far from certain given the analysis earlier looking at the growth benefit that equities have over bonds, and the fact that while this growth was previously factored into relative yields, it does not seem to be at present. In an inflationary period, this ability to pass through increasing costs and grow faster in nominal terms could cause equities to trade more in line with their historic relationship to bonds. Consistent with this possibility, the last time 10-year Treasury yields were above 5%, equity free cash yields traded at a significant discount to them as opposed to the current premium (see **Figure 10**). Even when the 10-year treasury yield was at 12%, the equity free cash yield was 6%, which is only slightly above where it is today.

When 10-year Treasury yields were last above 5%, equity free cash yields traded at a significant discount to them rather than their current premium.

Figure 10: Equity Free Cash vs. 10-Year Treasury Yield



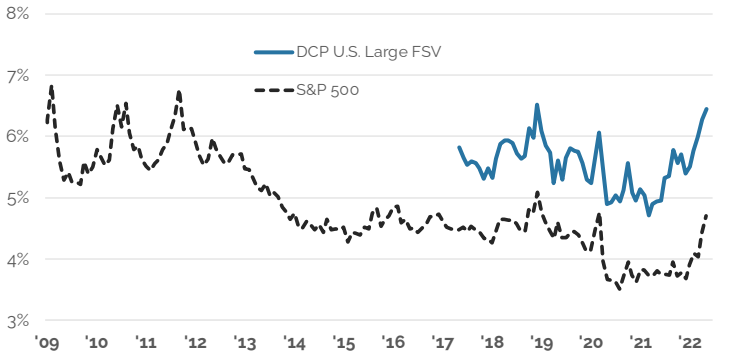
Source: FactSet, Standard & Poor's 5/20/22

Final Word

Amid an uncertain economic future, equities offer an attractive advantage of being able to pass through inflationary costs over the longer-term, but their present relative valuation against bonds does not seem to fully capture the benefit as it did historically. On top of this general opportunity in equities, we believe our equity investment methodology offers several further potential benefits. First, by investing in equities with stable cash flow profiles and low debt, we hope to cushion the potential deleterious impacts of a sharper than desired economic slowdown from rising interest rates. Second, while the overall market valuation looks attractive on free cash yields, our strategies offer significantly higher expected yields that we hope will provide an even greater buffer against a scenario in which higher inflation might pressure valuations.

Distillate Capital's U.S. FSV strategy is trading near its widest FCF to EV yield over the S&P 500 benchmark despite outperforming it.

Figure 11: Free Cash to Enterprise Value Yield Over Time

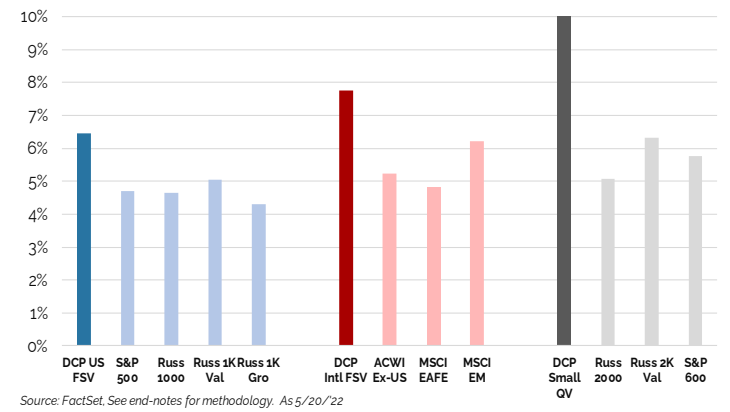


Source: FactSet, See end-notes for methodology. 5/20/22

In this regard, we are encouraged that despite outperformance against the S&P 500 since we started the strategy in May of 2017, the free cash to enterprise value yield of our U.S. Fundamental Stability and Value (U.S. FSV) strategy remains near an all-time high in both absolute terms and relative to that of the S&P 500 benchmark (see **Figure 11**). **Figure 12** shows the same metric for each of our strategies versus their respective benchmarks at present.

Distillate's strategies are more attractively valued than their benchmarks.

Figure 12: Current Free Cash to Enterprise Value Yield



Source: FactSet, See end-notes for methodology. As 5/20/22

***Distillate Capital Partners LLC ("Distillate")**, is a registered investment adviser with United States Securities and Exchange Commission in accordance with the Investment Advisers Act of 1940. The firm's list of composite descriptions is available upon request.*

Distillate claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Distillate has been independently verified for the periods June 1, 2017 through November 30, 2018. The verification report is available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation.

To receive a GIPS compliance presentation and/or our firm's list of composite descriptions please email your request to info@distillatecapital.com.

The U.S. Dollar is the currency used to express performance. Returns are presented net of management fees and include the reinvestment of all income. For non-fee-paying accounts, net of fee performance was calculated using a model management fee of 0.39%, which is the highest investment management fee that may be charged for this composite. For accounts calculated with a per share, net-of fee NAV, gross performance was calculated by adding back the unitary fee associated with that fund. Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

The investment management fee schedule for the composite is 0.39%; however, actual investment advisory fees incurred by clients may vary.

The U.S. Fundamental Stability & Value composite seeks to distill a starting universe of large cap U.S. equities into only the stocks where quality and value overlap using Distillate's proprietary definitions. Its goal is to achieve superior compounded long-term returns by limiting downside in periods of market stress, while still providing strong performance in up markets. This composite was created in May 2017.

*This material is provided for informational purposes only and is not intended as an offer or solicitation for the sale of any financial product or service or as a recommendation or determination by DCP that any investment strategy is suitable for a specific investor. Investors should seek financial advice regarding the suitability of any investment strategy based on their objectives, financial situations, and particular needs. The investment strategies discussed herein may not be suitable for every investor. This material is not designed or intended to provide legal, investment, or other professional advice since such advice always requires consideration of individual circumstances. If legal, investment, or other professional assistance is needed, the services of an attorney or other professional should be sought. The opinions, estimates, and projections presented herein constitute the informed judgments of DCP and are subject to change without notice. Any forecasts are subject to a number of assumptions and actual events, or results may differ from underlying estimates or assumptions, which are subject to various risks and uncertainties. All investments in securities, options and derivatives involve a risk of loss of capital and no guarantee or representation can be made that an investment will generate profits or that an investment will not incur a total loss of invested capital. Furthermore, nothing herein is intended to imply that DCP's investment strategies may be considered "conservative", "safe", "risk free" or "risk averse." **No assurance can be given as to actual future results or the results of DCP's investment strategies.** Portfolio holdings and sector allocations are subject to change at any time and should not be considered recommendations to buy or sell any security. The information in this presentation has been obtained or derived from sources believed to be reliable, but no representation is made as to its accuracy or completeness.*

***Free Cash Flow** refers to a company's operating cash flow, less its capital expenditures.*

***Enterprise Value** refers to a company's market capitalization plus its net debt balance.*

***Free Cash Flow to Enterprise Value Yield** refers to a company's or group of companies' free cash flow divided by the company's (or companies') Enterprise Value, with a higher resulting ratio indicating a more attractive valuation.*

***Normalized Free Cash Yield (or Distilled Cash Yield)** refers to the firm's proprietary valuation measure that looks at estimated, adjusted free cash flow relative to a company's adjusted enterprise value. References to historical stocks that ranked well using this methodology refer only to these stocks' historical valuation and not their inclusion in any actual or hypothetical strategies/accounts managed by Distillate Capital Partners LLC.*

***Long-term Fundamental Stability** is Distillate Capital's proprietary measure of through-cycle cash flow stability with a higher value indicating greater stability.*

***Methodology note for Figure 9:** FactSet data is used for the free cash flow calculation and goes back to 1985. Constituents without cash flow data were excluded and the index re-weighted. Fiscal year data is used prior to 2000 and trailing twelve-month data thereafter. For **Figures 11 & 12:** free cash flow (FCF) figures reflect consensus estimates of next-twelve-months (NTM) FCF in comparison to enterprise value (EV) for the relevant portfolio/strategy or benchmark. Stocks without data are excluded and portfolios are reweighted accordingly. Stocks with FCF/EV values of greater than 50% or less than -20% have been eliminated to avoid distorting overall averages. Data as of 5/20/22.*

The S&P 500 Index is an index of roughly the largest 500 U.S. listed stocks maintained by Standard & Poor's. The iShares Russell 1000 Value ETF is an investable benchmark used as a proxy for its underlying index, the Russell 1000 Value Index, an index of U.S. listed stocks that possess attractive valuation as measured FTSE Russell. The iShares MSCI ACWI Ex-US ETF is an investable benchmark used as a proxy for its underlying index, the MSCI ACWI ex USA Index, an index managed by MSCI representing large and mid cap stocks outside of the U.S. The iShares Russell 2000 ETF and iShares Russell 2000 Value ETF are investable benchmarks used as a proxies for the underlying indexes of the Russell 2000 Index (an index of U.S. listed small cap stocks) and the Russell 2000 Value Index (an index of U.S. listed small cap stocks that possess attractive valuation as measured FTSE Russell).

Indices are not available for direct investment. Investment in a security or strategy designed to replicate the performance of an index will incur expenses, such as management fees and transaction costs, which would reduce returns.

The names of actual companies and products mentioned herein may be the trademarks of their respective owners.

© Copyright 2022 Distillate Capital Partners LLC

Published May 21, 2022