2023 Market Outlook

The Great Balancing Act

Michael Arone, CFA

Chief Investment Strategist, US SPDR Business

Matthew Bartolini, CFA, CAIA

Head of SPDR Americas Research

Contributor

Anqi Dong, CFA, CAIA

Senior Research Strategist

Interest rates continue to rise as global central banks aggressively tighten to fight inflation, while still avoiding recession. With so much hinging on whether the Federal Reserve can engineer a soft landing, how should you position portfolios?

A Macro View

Between Hope and Fear

The best thing investors can say about 2022 is that it's almost over. After years of ultra-low interest rates that flattered financial asset prices, rates rose rapidly in response to aggressive global central bank policies to combat soaring inflation, leaving investors few places to hide.

Ultimately, the intrinsic value of any security — stock, bond, real estate — is the present value of future cash flows discounted at the discount rate. Investors' inability to accurately determine the discount rate created enormous market volatility in 2022.

And because the value of the security decreases as the discount rate increases, 2022's substantial increase in the discount rate resulted in significant declines across virtually every asset class, from the most conservative to the most speculative. Typical US midterm election anxiety, China's zero-COVID policy, and the Russia-Ukraine war magnified capital market volatility and investor losses.

As a result, the traditional 60/40 investment portfolio is on pace to record its worst calendar year performance in 85 years, since 1937.¹

And yet, despite this gloomy backdrop, investors will start 2023 stuck somewhere between hope and fear.

Hope for a Soft Landing

Excitement over a potential slowdown in both the pace and magnitude of Federal Reserve (Fed) rate hikes — the so-called Fed pivot — has led to several brief but strong bear market rallies over the past six months. And several measures of inflation have begun to show signs of decelerating, fanning the Fed pivot flames. On November 10, the Consumer Price Index (CPI) rose less than expected in October, sending stock prices sharply higher and bond yields lower. Just days later, the Producer Price Index (PPI), a measure of the prices that companies get for finished goods in the marketplace, also increased less than expected.

Despite the most aggressive Fed rate hikes in history, the economy, corporate profits, and labor markets aren't signaling a recession on the horizon just yet.

In the aftermath of the 20th National Congress Communist Party, there is growing speculation that China is desperately seeking a solution to its zero-COVID policy. And, with the onset of winter, there is increasing pressure on Russia and Ukraine to pause military actions and begin to negotiate a settlement.

All this has raised investors' hopes that the Fed will be able to engineer a soft landing in the first half of 2023

Fear of the Fed's Inflation Fight

But investors know that hope is not a strategy. In fact, the Fed has successfully produced a soft landing just three times in the modern era — in the mid-1960s, 1984, and 1994. Against these odds, investors fear that having waited too long to begin its battle with inflation, the Fed will tighten too much to defeat it — and finally break something somewhere in the global capital markets. A deep recession, plummeting corporate profits, and steep job losses almost always follow such a misstep. These fears consume investors as we charge toward 2023.

The Fed's willingness to risk recession and withstand higher market volatility so that it can firmly defeat inflation suggests that, until it declares victory, risks likely will remain skewed to the downside.

Mind the Gap Between the Economy and Market

Sentiment shifting between hope and fear highlights one of the enduring investment lessons from the pandemic: the economy is not the market. In fact, the gap between the economy and the market has widened dramatically over the past few years.

Oddly, at the height of the COVID-19 health crisis in 2020–2021, markets rallied. Investors recognized that eventually a health solution to the coronavirus would be achieved, the economy would reopen, earnings would rebound, and jobs would return. Afterall, the market is a forward-looking mechanism. Easy monetary policy and massive government spending also aided the pandemic recovery.

Just as strangely, in 2022 — despite a modestly expanding economy, healthy corporate profits, and a strong labor market— financial asset prices collapsed under the weight of tighter monetary policies, fading fiscal spending, surging inflation, China's zero-COVID policy, and the Russia-Ukraine war.

Now, as 2023 begins, investors expect the economy to falter, corporate profits to plunge, and job losses to rise due to the lag effects of aggressive Fed rate hikes. This potential recession is the most anticipated in modern history. Wildly, when it finally arrives, investors may breathe a

welcome sigh of relief and begin looking ahead to the inevitable recovery. Before the economic, earnings, and job market data hit rock bottom, investors will have already begun to price in the next phase of the economic cycle. The question is, will your portfolios be ready?

Consider these three strategies when constructing investment portfolios for 2023:

- 1 Play offense and defense with dividend payers
- 2 Manage yield and duration in the hunt for total return
- 3 Find opportunities in discarded markets

Theme 1

Play Offense and Defense with Dividend Payers

Equity investors faced wild market swings in 2022. On more than 52% of the year's days, the S&P 500 Index produced gains or losses of +/-1%. This was the highest rate since 2008 and the second-highest since the 1950s.²

High inflation, rising rates, increased geopolitical tensions, and weakening growth drove returns on the market's down days. Hope drove the upside. Hope that inflation would soon slow, that the Federal Reserve (Fed) would pivot from its aggressive rate hikes, and that a strong labor market would dampen recessionary spirits in economic and fundamental data.

Hope is a good thing, but it isn't a strategy. In this environment, while defensive positioning may be a better approach, it ignores the inevitability of an inflection point. The Fed can't hike rates forever. Eventually earnings cynicism will find a bottom and optimism will be repriced. In the meantime, positioning portfolios for the fundamental weakness washing over the world, while acknowledging the potential for future positivity, takes combining offense with defense.

Dividend-paying firms support that mix.

Defensively, dividend payers have a consistent track record of returning value to shareholders but aren't overly allocated to defensive market segments. And, they typically have a strong relationship to the value factor — a pro-cyclical exposure. As a result, dividend-focused strategies may help investors cautiously position for a cyclical recovery, without needing to pinpoint the timing of the pivot.

Navigating Inflation-Driven Downturns with Dividends

While inflation has declined from its peak, it's still at a four-decade high. Consumer inflation expectations also remain near 40-year highs.³ While aggressive Fed policy has led to some improvement, defeating inflation will take some time. In the early 1980s when CPI was this elevated, it took 15 months for inflation to stabilize below 3%.

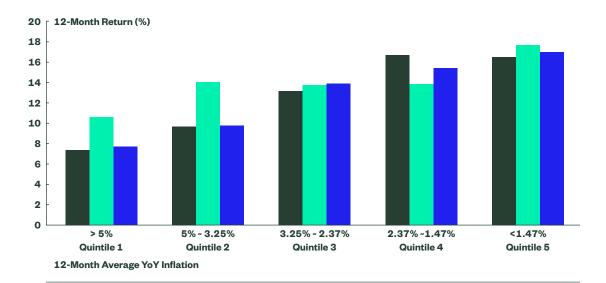
History shows, however, that dividend stocks thrive in prolonged inflation-driven markets. Since 1948 — including three periods of high inflation in the 1950s, 1970s, and 1980s — high-dividend stocks significantly outperformed their low-dividend peers and the broader market when 12-month average CPI inflation was in the top two quintiles (above 3.25%). See the following chart.

Figure 1

Dividend Stocks

Outperform When
Inflation Is High





Source: Kenneth French Data Library, for periods from 01/01/1948–09/30/2022. Low and high dividend stocks are represented by the bottom and top quintile groups based on dividend yield. **Past performance is not a reliable indicator of future performance.**

With high inflation placing downward pressure on profit margins and monetary tightening squeezing aggregated demand, negative earnings revisions have picked up for 2023. The bottom-up consensus earnings per share (EPS) estimates for 2023 have been cut by 7% to \$233 since their June 2022 peak, compared to a historical average decline of 3% in the quarter leading into a new year.⁴ And with leading economic indicators falling deeper into negative territory — flashing warning signs of a recession — additional earnings downgrades are highly likely.

Despite these growth headwinds and downside revisions, more than 90% of firms report they plan to keep or increase their dividend.⁵ In fact, the median decline in dividends paid by S&P 500 companies in the past 12 US recessions since World War II was just 1%. And there was no decline in four of those recessions when inflation was above 5%, in 1974, 1980, 1981, and 1990.⁶

Given that dividend payments are more stable than stock price movements — providing an income cushion for total return — dividend strategies have had reduced drawdowns and lower volatility during bear markets, on average. In the 13 bear markets since 1960, high dividend stocks outperformed low dividend paying firms, as well as the broad market by an average of 12% and 8%, respectively.⁷

In fact, high dividend equities have demonstrated consistent outperformance, as they outpaced low dividend paying firms and the broader market in 11 of those 13 bear markets, as shown in the following chart.

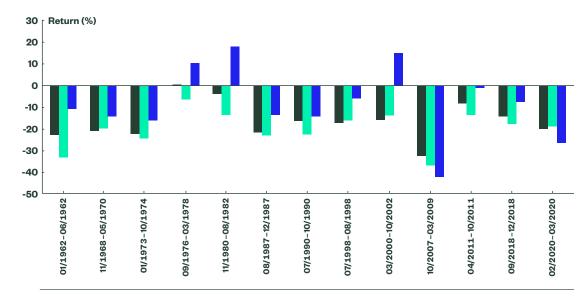
Figure 2

Dividend Stocks

Outperform During

Bear Markets





Source: Kenneth French Data Library, as of 09/30/2022. Low and high dividend stocks are represented by the bottom and top quintile groups based on dividend yield. **Past performance is not a reliable indicator of future performance.**

High dividend stocks underperformed only twice — during the Global Financial Crisis (GFC) and the COVID-19 pandemic — when the respective impairment of the banking system and the public health system caused many companies to cut or suspend their dividends.

Unlike those two periods, our current economic downturn is driven by typical slowing of aggregated demand on the back of monetary tightening. And so far, dividend stocks have shown similar resiliency to what we saw during most other bear markets, outperforming the broad market by 16% year to date.⁸

Positioning for the Central Bank Policy Pivot

While central banks will continue to tighten until inflation is under control, disinflationary forces have started to emerge as the tightening has begun to transmit to the broader economy. The ISM PMI Price Index indicated decreasing prices for the first time since May 2020.9 Global supply chain pressures are back in line with historical levels. Wage inflation has fallen to its lowest level in one year, and rent increases have slowed. Wage inflation has fallen to its lowest level in one year, was also shown to the first time since May 2020.9 Global supply chain pressures are back in line with historical levels. Wage inflation has fallen to its lowest level in one year, where the first time since May 2020.9 Global supply chain pressures are back in line with historical levels.

Disinflationary, however, is not deflationary. It just means declining inflation.

After all, our current headline inflation figure is still above historical levels, even if it is slowly declining. Yet, at some point, these disinflationary forces will accelerate and translate to persistent downward trends in consumer prices. At that point, central banks will shift their focus to growth worries and begin easing.

A policy pivot could potentially renew sentiment toward more cyclical segments of the market and usher in hope for earnings positivity off a very cynical base. But the timing is uncertain. While a pivot is getting closer, as the Fed enters the later stages of its hiking cycle and earnings continue to be revised lower, the change in trend is unlikely to occur right away.

Dividend strategies can serve as a bridge to move portfolios smoothly from a defensive stance to a more hopeful environment.

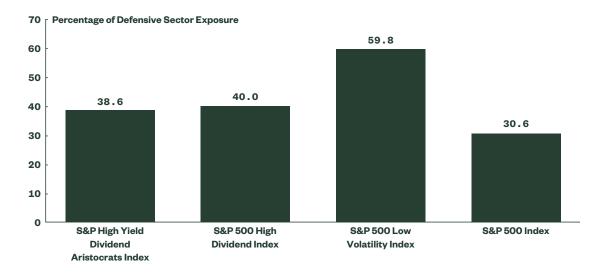
While slightly more defensive than the broader market, they are less defensive (and more offensive) than low volatility strategies, as shown in the following chart. This has led to more upside capture by dividend yield strategies over the past decade versus the full-blown defensive low-volatility strategies (72% vs. 56%).¹³

Figure 3

Dividends Play

Better Offense

Than Low Volatility



Source: FactSet, as of October 31,2022. Defensive sectors are the ones with low 1-year beta to the broad market, including Consumer Staples, Utilities, Health Care and Energy.

Allocating to
Undervalued Dividend
Stocks for 2023

Despite dividend stocks' leading performance in 2022, their attractive valuations and investors' light positioning point to more upside potential.

After underperforming the broad market for three consecutive years, dividend stocks' relative valuations were within the bottom decile over the past two decades based on price-to-forward-earnings, price-to-book, and price-to-cash-flow ratios at the beginning of 2022. ¹⁴ Even given their significant outperformance year to date, their relative valuations are well below their long-term median (31st percentile based on price/forward 1-year earnings; 25th percentile based on price/cash flow; 21st percentile based on price/book). ¹⁵

Holdings indicators produced by State Street Global Markets, using aggregated and anonymized custody data of \$43.7 trillion in assets, ¹⁶ show that investors' holdings of dividend stocks have declined since the GFC, as dividend stocks underperformed growth stocks for most of those years. During the pandemic, investors' underweight in dividend stocks reached its highest level in two decades, as growth beat dividend yield exposures by 21% on an annualized basis in 2020 and 2021.¹⁷

Although investors have been rebuilding their positions in dividend stocks amid elevated market volatility, allocations increased only to the 20th percentile over the past 20 years, indicating a significant underweight by historical measures. ¹⁸ If dividend stocks continue showing resilience amid elevated market volatility and economic downturns, mean reversion in investors' allocations may further support dividends' performance in 2023.

Implementation Ideas

To take advantage of dividend payers' unique mix of defensive and offensive characteristics as markets brace for more volatility, while remaining hopeful about the future, consider:

Companies that have consistently increased their dividend for at least 20 consecutive years	SDY
	SPDR® S&P® Dividend ETF
The 80 highest dividend-yielding companies within the S&P 500 Index	SPYD
	SPDR® Portfolio S&P 500® High Dividend ETF
The 100 highest-yielding international stocks that have passed certain fundamental sustainability and earnings	DWX
growth screens	SPDR® S&P® International Dividend ETF

Theme 2

Manage Yield and Duration in the Hunt for Total Return

With hawkish central banks continuing to push rates higher to fight inflation, core bonds look to post back-to-back calendar year losses for the first time ever.¹⁹ And as credit spreads widened amid sluggish growth and heightened volatility, taking on credit risk also led to losses in 2022.

On the positive side, aggressive rate hikes from the Federal Reserve (Fed) and other global central banks have resulted in a great rate reset that has dislodged the bond market from a low-rate, near-zero yield era. With the amount of negative yielding debt falling by 85%, 20 bond investors now have numerous attractive yield opportunities on the short-end of the curve.

These opportunities are, however, predicated on the continuation of higher rates. And although markets are projecting rates to decline by late 2023, central banks are likely to remain plenty aggressive in the near term.

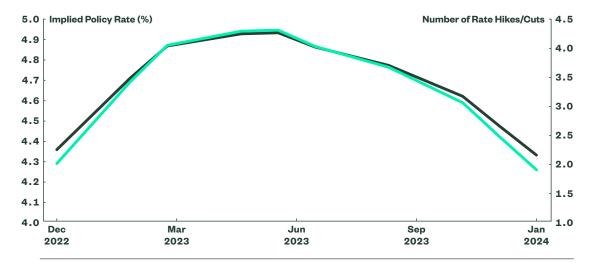
Until the Fed's battle against inflation turns less aggressive, the elevated yields in defensive short-duration sectors may help investors balance income and total return in order to preserve capital. Meanwhile, tightening monetary policy and mixed fundamentals reinforce the case for core active strategies.

For Rates, More of the Same, Most of the Time

When the October inflation data came in below expectations, Fed officials stressed that they need to see sustained easing of pricing pressures before pausing the Fed's aggressive policy stance. Accordingly, beyond what was done in 2022, the markets expect the Fed to raise rates by another 50 basis points (bps) in December, followed by 25 bps hikes at the first two 2023 meetings in February and March. In fact, hiking could continue through June, after which rates are expected to fall, as shown in the following chart.

Figure 4
Fed Funds Rate
Policy Path Projects
Rate Hikes Followed
by Cuts





Source: Bloomberg Finance L.P. as of November 13, 2022 based on Fed Fund Futures pricing. **Past performance is not reliable indicator of future performance.**

If the Fed follows through on its comments, the fed funds rate could be 4.50% by its first 2023 meeting — the highest level since 2007.²³ The fed funds rate sets the tone for the broader rate market. For instance, the US 2-year yield historically trades at a 36 bps premium to the fed funds rate, but it now trades at a 33 bps premium.²⁴ This means:

- The US 2-year yield could start 2023 at 4.86%, if the average relationship holds
- The market does not expect the Fed to become more aggressive right away, given that the current premium is in line with the historical average

Interestingly, throughout 2022 the premium averaged 126-bps, ²⁵ as the forward-looking nature of the market more rapidly priced in the central bank's aggressiveness ahead of its meetings and policy decisions.

For now, whether it is a surprising inflation print or continued forward guidance from Fed officials to expect stepped-down, non-jumbo hikes, it's doubtful that the US 2-year yield will get as far ahead of the fed funds rate in 2023 as it did in 2022.

Nevertheless, a 4.86% US 2-year yield to start 2023 would be the highest since 2007.²⁶ Another impact would be the derivative effect further Fed tightening has on the yield curve.

Looking ahead, it is highly unlikely that the current -52 bps inversion between the US 2-year and the US 10-year yield will remain that negative. In fact, we think the US 10-year likely will rise *faster* than the US 2-year as the Fed continues rate hikes, given that we are at the deepest inversion since 1980. Further, the Fed signalling stepped-down rate hikes could possibly be viewed as growth positive and lead to a steepening of the curve that leaves it less inverted.

What's the upshot for bond portfolios if we see more of what we saw in 2022 for most of 2023? Core bonds with over six years of duration are likely to once again post duration-induced price declines. Meanwhile, shorter-duration segments may offer more attractive yield and total return prospects as result of less rate risk.

Be Cautious on Credit When Reaching for Yield Reaching for returns with high yield bonds in 2022 was met with a double-digit dose of negativity, as high yield has posted a -13% loss to date.²⁷ Despite the sizable negative return, credit spreads are not constructive. In fact, single-B rated and double-B rated, as well as broad high yield, all have spreads well below their 20-year averages.²⁸

For broad high yield, current spreads are 10% below their long-term average and close to the 70th percentile — a level that doesn't necessarily scream value, despite the weak returns.²⁹ Part of this is that high yield spreads began 2022 in the low 300 bps range. This continued lack of fundamental flexibility is a major reason why investors may want to be cautious on credit.

Ratings sentiment has not been this negative since the start of the COVID-19 pandemic. High yield bonds have had twice as many downgrades as upgrades over the past two quarters.³⁰ The trend is also unfavorable, as the upgrade-to-downgrade ratio fell in every quarter of 2022.³¹

This weak sentiment is likely to extend to defaults. Trailing 12-month defaults on a par-weighted basis are projected to increase from 1.3% to 6.0% over the next 12 months — well above their historical 3.3% median.³²

This uptick coincides with lower growth from high yield issuers that mirrors the sluggish earnings picture for US equities. More than 75% of the publicly-listed high yield issuers that published earnings results through mid-November revealed an EBITDA decline of 3.3% from the prior quarter.³³ Revenues and margins also declined, underscoring the challenging fundamental environment for 2023.³⁴

The yield for high yield is very attractive, however. The yield to worst on broad US high yield bonds now hovers around 9%, above the 20-year historical average. Yet, this is more of a function of the elevated rate market, as spreads are still tight.

When viewed relative to US investment-grade corporate bonds, however, the yield differential of high yield is 331 bps, tighter than the long-term historical average of 370 bps. ³⁶ This indicates that investment-grade corporate bonds have a slightly more relative attractive yield profile (absolute level is 5.6%)³⁷ given the many fundamental risks in the market.

Subpar returns that saw 65% of the headline figure reduced by duration effects, ³⁸ weak ratings sentiment, dour fundamentals, sluggish growth, and more attractive yield opportunities elsewhere mean a cautious outlook for below investment-grade credit. Yet, if this weakness manifests in an environment that pushes spread levels above historical averages, there could be periods to consider tactically overweighting high yield in 2023.

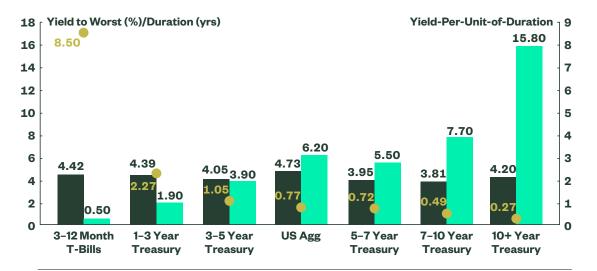
Working to manage the risks of tightening monetary policy that may give way to a policy pause, alongside mixed fundamentals in the new year, reinforces the case for core active strategies. By combining traditional and non-traditional fixed income asset classes with the goal of maximizing total return over a full market cycle, active sector allocation and security selection may be able to better defend against rate and credit risk than core aggregate bonds.

Shorten-Duration for Yield and Total Return

Higher rates have created attractive defensive yield opportunities on the short end of the curve — namely Treasurys with less than one-year of maturity given the recent inversion of the 3-month and 10-year yield spread. An aggressive Fed and the likelihood for more rate hikes to come mean yields on 3–12 month T-bills are now higher than those of all different tenors. And given the maturity band, the rate risk for this exposure is minimal, as shown in the following chart.

Figure 5
3-12 Month T-Bills
Offer High Yields
and Low Risk





Source: Bloomberg Finance, L.P., as of November 13, 2022. Agg. = Bloomberg U.S. Aggregate Bond Index. Treasury exposures from the Bloomberg U.S. Treasury Index for the defined tenor. 3–12 Month T-Bills = Bloomberg U.S. Treasury 3–12 Month T-Bill Index. **Past performance is not a reliable indicator of future performance.** Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income as applicable.

As a result, this portion of the curve represents a potentially attractive trade-off compared to the 1–3 year Treasury market, the closest portion of the curve with a similar yield (3–12 month T-bills have a higher yield-per-unit-of-duration). Only 1–3 month T-bills have a better yield-per-unit-of-duration profile, but their yield is still below 4%.

The lack of duration from this defensive tenor has also limited 2022's duration induced price declines (+0.29% versus 1–3 year Treasurys' -4.80% year-to-date return)³⁹ and could continue to do so if the Fed follows through on its hawkish rhetoric.

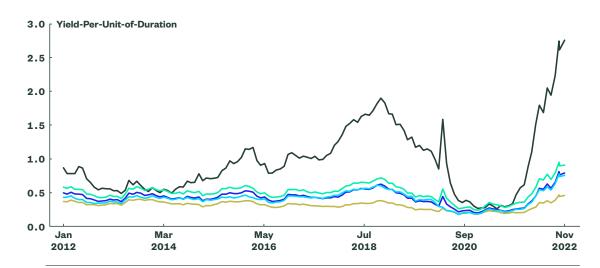
The 1–3 year US investment-grade corporate bond segment — yielding over 5.3%, a level not seen since the GFC 40 — also has witnessed an increase in relative attractiveness. Rates have moved so swiftly that the sector's yields are 250 bps above their 20-year average. Duration has remained steady and now sits at 1.95 years, on par with its 20-year average, and while rates have changed, the term structure has not.

As a result of the rise in yields, but stasis rate risk, 1–3 year corporates' yield-per-unit-of-duration is 2.6, 78% above its long-term average and in the 99th percentile post-GFC.⁴³

Not all portions of the credit curve, however, have witnessed the same beneficial rise in their yield-per-unit-of-duration, a by-product of the currently inverted yield curve. Of the five segments shown in the following chart, only 1–3 year corporates saw a significant rise in yield-per-unit-of-duration.

Figure 6
Yield-Per-Unit-ofDuration for 1-3 Year
Corporates Soars





Source: Bloomberg Finance, L.P., as of November 13, 2022. **Past performance is not a reliable indicator of future performance.** US 1–3 Year Corp = Bloomberg U.S. 1–3 Year Corporate Bond Index, US 5-10 Year Corp = Bloomberg U.S. 5–10 Year Corporate Bond Index, US 10+ Corp = Bloomberg U.S. 10+ Year Corporate Bond Index, Broad US Corp = Bloomberg U.S. Corporate Bond Index, US Agg = Bloomberg U.S. Aggregate Bond Index. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income as applicable.

Given that credit spreads are below their long-term average (86 bps versus 110 bps), but right at their post-GFC average of 82 bps, the extra yield is not a result of outsized credit risk, which is a potential benefit given the mixed fundamentals.⁴⁴

As a result, the 1–3 year investment-grade space, a segment carrying an index-weighted average rating of A3/BAA1,⁴⁵ represents a high-quality value opportunity to pick up a yield that is on par with the US equity market earnings yield (5.1%)⁴⁶ and above that of the broader US aggregate bond market (4.7%),⁴⁷ without taking on any more *duration or credit risk* than one would have assumed over the past 20 years in this portion of the credit market.

Implementation Ideas

For strategies that help manage duration risks in the pursuit of total return, consider:

Low duration, investment-grade strategies with attractive yield-per-unit-of-duration profiles	SPSB
	SPDR® Portfolio Short Term Corporate Bond ETF
	BILS
	SPDR® Bloomberg 3-12 Month T-Bill ETF
Active total return core mandates with a history of defensive positioning to manage for a pause or pivot in rate hikes	TOTL
	SPDR® DoubleLine® Total Return Tactical ETF

Theme 3

Find Opportunities in Discarded Markets

In 2022, rising rates, geopolitical conflict, and sluggish growth pushed global stocks and bonds into a bear market at the same time, for the first time ever.⁴⁸ Within global equities, just one third of countries⁴⁹ — and only one sector⁵⁰ — posted a positive median stock return. Bonds fared even worse. Every country, sector, maturity bucket, and credit quality rating band in the 32,000 bond holdings within the Bloomberg Global Multiverse Bond Index suffered losses.⁵¹

Now, as a result of this pain, many markets trade well below their perceived fair value — some justifiably, given the confluence of risks. Unfortunately, the three factors inflicting pain at the close of 2022 are unlikely to change in 2023 — not immediately, at least. At some point, though, Fed policy may become less aggressive, and earnings sentiment could find a bottom.

If that happens, sentiment could shift to the healing phase of this cycle, given the market's forward-looking nature. And some segments thrown out of balance in 2022 may be the first to mean revert in 2023, revealing the hidden value in today's downtrodden and discarded areas.

Unearthing Value in US Small Caps

Given the broad-based negative returns, some investors might think all markets present value opportunities. But that's not the case.

For starters, even though US equities have fallen by 16%, they still trade at 17.9 times next year's earnings. ⁵² That's still above the long-term average of 17.1 times, ⁵³ and doesn't indicate broadbased value for contrarian investors looking to zig when everyone else zags.

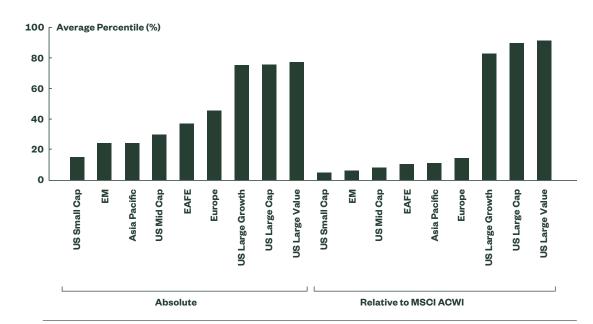
Outside the US, the valuation case has more merit. Non-US equities now trade at 12.17 times next year's earnings, 20% below their historical median average of 14.94.⁵⁴ The same is true under a shorter horizon, as US stocks trade on par and at 7% above their 5- and 15-year median levels.⁵⁵ Meanwhile, non-US stocks trade 11% and 12% below their 5- and-15-year median levels, respectively.⁵⁶

This doesn't mean every US market is rich and any country outside the US, cheap. Comparing multiple fundamental metrics rather than just one gives investors the needed nuance to rummage through the bargain bin.

We calculated percentile ranks using a five-factor ensemble valuation screen⁵⁷ analyzing both absolute and relative valuations to the broader global market over the past 15 years. US small caps, followed by emerging markets (EM), screen as the most attractive. All US large caps are the most expensive, including large-cap value stocks — a reflection of their significant outperformance.

Figure 7

Valuation Screens
for Markets Trading
Above or Below
Historical Levels



Source: Bloomberg Finance L.P., as of November 14, 2022 based on historical valuations from 2007–2022. US Small Cap = S&P 600 Small Cap Index, US Mid Cap = S&P MidCap 400 Index, EM = MSCI Emerging Markets Index, Asia Pacific = MSCI AC Asia Pacific Index, EAFE = MSCI EAFE Index, Europe = MSCI Europe Index, US Large Cap Growth = S&P 500 Growth Index, US Large Cap = S&P 500 Index, US Large Cap Value = S&P 500 Value Index. Relative valuations versus the MSCI ACWI IMI Index, Mid Cap = S&P 400 Mid Cap Index. Past performance is not a reliable indicator of future performance.

EM may be cheap for a reason, as earnings revisions have trended sideways and an 11% decline in 2022 earnings growth is currently projected. ⁵⁸ Not ready to signal a bottom in fundamental sentiment, analysts' 2023 earnings estimates continue to decline. Next year's growth rate for EM has dropped to 1.7% from 6.0% over the past three months. ⁵⁹

Small caps haven't witnessed the same degree of negative earnings sentiment. In fact, 2022 earnings-per-share growth is estimated to be 14%, a full percentage point higher than forecasts at the start of the year. Additionally, 2023 estimates still call for 4% growth, with three of the four quarters expected to show positive growth (unlike EM, where growth is projected to be flat or negative every quarter).

Risk aversion helps explain some of the negativity toward small caps from a price return perspective. Small caps are a volatile market segment, and investors dialed down risk in 2022 amid the multitude of macro factors impairing sentiment. This risk aversion rationale is reinforced by the fact that, in 2022, small caps registered their highest average 30-day correlation (93%) to high-beta stocks since 2011 (93.7%). Simply put, anything with a whiff of risk was seemingly discarded.

While risk is still likely to be elevated in the near term, if a policy pivot turns market pessimism to optimism and risk aversion declines, our view is that segments with decent fundamentals and attractive valuations may enter a repair phase more quickly than expensive areas. Domestically oriented US small caps represent one of these possibilities, given their cross-sectional valuation.

Semiconductors Send a Signal Above the Noise

Within US equities, the semiconductor industry was one of the worst performers in 2022. Its high-growth, long-duration profile was impaired by the significant increase in rates. Semiconductors underperformed the S&P 500 Index by 9% after registering positive excess returns in eight of the past nine calendar years. This was the industry's worst relative performance since 2012, when it fell 10% relative to the market.

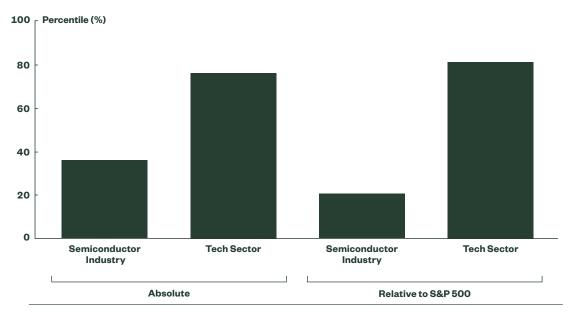
Given this dour return backdrop, semiconductor stocks are trading at potentially attractive valuations. On an absolute basis, the current average percentile of the same five-factor-fundamental screen is 36% over the past ten years, as shown in the following chart. Meanwhile, valuations are, on average, in the lower 20th percentile relative to the broader US equity market.

But beneath the surface, three metrics are in the bottom 5th percentile:

- 1 Price to Earnings (P/E)
- 2 Forward 1-Year Price to Earnings Ratio (P/E FY1)
- 3 Enterprise Value to Earnings before interest, taxes, depreciation, and amortization (EV/EBITDA)

These percentile rankings are much more attractive than broad-based tech, a sign that semiconductors carry a differentiated profile than the broader sector.

Figure 8
Semiconductors
Screen Attractive



Source: Bloomberg Finance L.P., as of November 14, 2022. Semiconductor Industry = S&P Semiconductor Select Industry Index, Tech Sector = S&P 500 Information Technology Sector. **Past performance is not a reliable indicator of future performance.**

While valuations have re-rated, growth expectations remain elevated. Expected 3–5-year EPS growth has increased from 17.7% at the beginning of 2022 to 18.8%. 64 Compared to the broader Tech sector, this seemingly minor one percentage increase is substantial, as the tech sector saw its longer-term forecasts ratcheted down to 12.9% from 14.6% over the same time frame. 65

The growth also comes off a more profitable base. Of the six other sub-industries within the broader Tech sector, the semiconductor industry has the largest percentage of firms (70%) with positive earnings-per-share figures over the past 12 months.⁶⁶

Future semiconductor growth could be further supported by the recently passed CHIPS and Science Act, which provides \$39 billion for construction of semiconductor plants and \$11 billion for semiconductor research and development to be disbursed through 2026. ⁶⁷ The CHIPS and Science Act could add significantly to the momentum in capital expenditures and the ongoing trend of reshoring semiconductor capacity. Announced semiconductor plans have already surpassed \$138 billion. ⁶⁸

Risks to the semiconductor sector include highly cyclical demand that is strongly correlated to global GDP and the fact that 80% of the industry's revenue comes from outside the US.⁶⁹ An upside surprise on growth stemming from a policy pivot and a weaker US dollar (USD) that mean reverts off 20-year peaks⁷⁰ could counterbalance the headwinds for semiconductor sentiment and the recent trend of softer, but still positive, sales.

Emerging Market
Local Debt and
Preferreds: Value in
Non-traditional Markets

The dollar's strength has hurt many markets this year, chief among them EM local debt.

The segment is expected to have its worst calendar year return ever of -16%, 1 which has pushed the yield on EM local debt to its highest level since the Global Financial Crisis, near 6.7%.

While a shift higher in yields from central bank policy actions detracted from returns, currency effects were the main culprit as the dollar strengthened and EM currencies fell. Historically, EM local debt returns have had a 94% correlation to the returns on EM currencies, so this trend is no surprise.⁷³

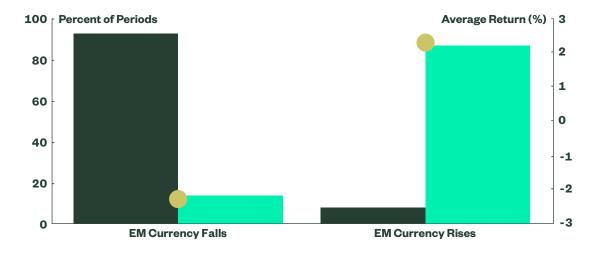
In fact, since 2008, EM local debt has had negative returns in 92% of the months when EM currencies fell (and the dollar strengthened), with an average monthly loss of -2.29%. As a result, an allocation into EM local debt is not so much a bullish view on the debt from developing nations, but rather a bearish view on the dollar.

Figure 9
EM Local Debt
Rises as EM Local
Currency Rises

EM Debt Losses

EM Debt Gains

EM Debt Avg. Return (%)



Source: Bloomberg Finance, L.P. as of November 14, 2022. EM Local Currency Government Diversified Index and the MSCI Emerging Market Currency Index based on monthly returns from 2008-2022. **Past performance is not a reliable indicator of future performance.** Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income as applicable.

High US inflation, rising US rates, and safe demand have kept the USD well-bid and trading at 20-year highs. Yet, given where we are from a valuation perspective, some near-term mean reversion could occur, particularly if a dip in inflation prompts a Fed pivot. That would be positive for risk-asset sentiment and could reduce the demand on the safe haven dollar.

The softening of the dollar would be net positive for EM local debt, as in the months when EM currencies rallied, EM local debt's return was positive 86% of the time with an average monthly gain of +2.27%, as shown in the previous chart. And as a result of the demoralizing returns, a potential dollar bear allocation offers a generationally attractive yield that just may be worth the risk.

Preferred securities also have witnessed steep declines, returning -16% this year and pushing yields over 6% for the first time since 2013 (except for the brief interval during the COVID-19 crash).⁷⁶ And not surprisingly, the average price on preferreds has dipped below 85,⁷⁶ the first time that preferreds have traded at this large of a discount to par (except for the brief interval during the COVID-19 crash).

Part of the reason for the sizable drawdown is that preferreds carry a duration of over seven years. 77 Preferreds are also equity sensitive, given that they are hybrid securities with features of both bonds and stocks. The underlying common equity on preferreds fell almost -8% in 2022, on average. 78

The weakness, however, is not a result of any outsized credit risk, as the composite quality rating on preferreds is investment-grade. Primarily issued by banks and insurance companies, preferreds count toward regulatory capital requirements — and banks issue preferreds to help maintain their required capital ratios. And as of the latest stress tests, major financial institutions were given a clean bill of health, indicating that the underlying fundamentals for the largest sector of issuance are reasonably sound. Description of the latest stress tests and the largest sector of issuance are reasonably sound.

Even with higher rates around the world, there is no sector, credit quality, or rating band in the Bloomberg Global Aggregate Bond Index that has a yield over 6%. Preferreds, therefore, offer a deeply discounted investment-grade yield opportunity and also may be able to participate in any risk aversion reversal in the equity market. The attractive entry point serves as a bit of a backstop and balances the risk that the Fed's policy pivot doesn't come soon or isn't as benevolent as many expect.

Implementation Ideas

For opportunities when the pendulum swings back to discarded market segments, consider:

US Small Caps	SPSM
	SPDR® Portfolio S&P 600™ Small Cap ETF
US Semiconductors	XSD
	SPDR® S&P® Semiconductor ETF
Emerging Market Local Debt	EBND
	SPDR® Bloomberg Emerging Market Local Debt ETF
Preferred Securities	PSK
	SPDR® ICE Preferred Securities ETF

Endnotes

- Bloomberg Finance, L.P., as of November 17, 2022. Based on the return for the MSCI ACWI IMI Index and the Bloomberg U.S. Aggregate Bond Index of a portfolio weighted 60% to equities and 40% to bonds.
- 2 Bloomberg Finance, L.P., as of November 11, 2022.
- 3 University of Michigan Consumer Survey, New York Fed Survey of Consumer Expectations, as of November 11, 2022.
- 4 FactSet, as of November 11, 2022.
- 5 "Equity Market Review Lessons from Q3 earnings and clues for 2023,", Barclays November 18, 2022.
- 6 Goldman Sachs, July 2022. The numbers are calculated by comparing the previous four quarters at the start of each recession with the last four quarters at the end.
- 7 Bear markets are defined as when the S&P 500 declined by more than 19%.
- 8 Dividend stocks are represented by the S&P 500 High Dividend Index, as of October 31, 2022.
- 9 ISM PMI, as of October 31, 2022.
- 10 New York Federal Reserve, Global Supply Chain Pressure Index, as of October 31, 2022.
- 11 US Bureau of Labor Statistics, based on average hourly earnings of all private employees, as of November 13, 2022.
- 12 US Rent Growth Continues to Slow in August, CoreLogic Reports.
- 13 FactSet, as of October 31, 2022. S&P High Yield Dividend Aristocrats Index and MSCI USA Minimum Volatility Index are used to represent dividend yield and low volatility strategies.
- 14 FactSet, as of November 11, 2022.
- 15 FactSet, as of November 11, 2022.
- 16 State Street Global Market, as of September 30, 2022.
- 17 FactSet, as of October 31, 2022. Growth is represented by the S&P 500 growth index. Dividend yield is represented by the MSCI USA High Dividend Yield Index.
- 18 State Street Global Markets, as of September 30, 2022.
- 19 Bloomberg Finance L.P., as of November 13, 2022 based on the Bloomberg U.S. Aggregate Bond Index.

- 20 Bloomberg Finance L.P. as of November 13, 2022 based on the Bloomberg Global Aggregate Bond Index.
- 21 "Fed's Waller Says There's a 'Ways to Go' Before Rate Hikes Done", Bloomberg November 14, 2022.
- 22 Bloomberg Finance L.P., as of November 13, 2022 based on Fed Funds futures pricing.
- 23 Bloomberg Finance, L.P., as of November 13, 2022 based on Fed Funds futures pricing.
- 24 Bloomberg Finance, L.P., as of November 13, 2022 based on the yield differential between the US 2-year yield and the Fed Funds Rate from 1982–2022.
- 25 Bloomberg Finance, L.P., as of November 13, 2022 based on the yield differential between the US 2-year yield and the Fed Funds Rate in 2022.
- 26 Bloomberg Finance, L.P., as of November 13, 2022 based on the US 2-year yield.
- 27 Bloomberg Finance, L.P., as of November 13, 2022 based on the Bloomberg U.S. High Yield Corporate Bond Index.
- 28 Bloomberg Finance, L.P., as of November 13, 2022 based on the ICE BoFA US High Yield Index and their associated rating bands.
- 29 Bloomberg Finance, L.P., as of November 13, 2022 based on the Bloomberg U.S. High Yield Corporate Bond Index.
- 30 Bloomberg Finance, L.P., as of November 13, 2022 based on S&P Ratings of the US High Yield universe.
- 31 Bloomberg Finance, L.P., as of November 13, 2022 based on S&P Ratings of the US High Yield universe.
- 32 BoFA High Yield Research, as of November 13, 2022.
- 33 BoFA High Yield Research, as of November 13, 2022.
- 34 BoFA High Yield Research, as of November 13, 2022.
- 35 Bloomberg Finance, L.P., as of November 13, 2022 based on the Bloomberg U.S. High Yield Corporate Bond Index.
- 36 Bloomberg Finance, L.P., as of November 13, 2022 based on the Bloomberg U.S. High Yield Corporate Bond Index and the Bloomberg U.S. Corporate Bond Index from 2002–2022.
- 37 Bloomberg Finance, L.P., as of November 13, 2022 based on the Bloomberg U.S. Corporate Bond Index.
- 38 Bloomberg Finance, L.P., as of November 13, 2022 based on the Bloomberg U.S. High Yield Corporate Bond Index.

Endnotes

- 39 Bloomberg Finance, L.P., as of November 13, 2022 based on the return of the Bloomberg 3-12 Month T-Bill Index and the Bloomberg U.S. Treasury 1-3 Year Index.
- 40 Bloomberg Finance, L.P., as of November 13, 2022 based on the Bloomberg U.S. Corporate 1–3 Yr Index.
- 41 Bloomberg Finance, L.P., as of November 13, 2022 based on the Bloomberg U.S. Corporate 1–3 Yr Index.
- 42 Bloomberg Finance, L.P., as of November 13, 2022 based on the Bloomberg U.S. Corporate 1–3 Yr Index.
- 43 Bloomberg Finance, L.P., as of November 13, 2022 based on the Bloomberg U.S. Corporate 1–3 Yr Index.
- 44 Bloomberg Finance, L.P., as of November 13, 2022 based on the Bloomberg U.S. Corporate 1–3 Yr Index.
- 45 Bloomberg Finance, L.P., as of November 13, 2022 based on the Bloomberg U.S. Corporate 1-3 Yr Index.
- 46 Bloomberg Finance, L.P., as of November 13, 2022 based on the S&P 500 Index.
- 47 Bloomberg Finance, L.P., as of November 13, 2022 based on the Bloomberg U.S. Aggregate Bond Index.
- 48 Based on the MSCI ACWI IMI Index and MSCI Global Multiverse Index as of November 14, 2022 per Bloomberg Finance, L.P., data.
- 49 Based on the MSCI ACWI IMI Index as of November 14, 2022 per Bloomberg Finance, L.P., data.
- 50 Based on the MSCI ACWI IMI Index as of November 14, 2022 per Bloomberg Finance, L.P., data.
- 51 Based on the MSCI Global Multiverse Index as of November 14, 2022 per Bloomberg Finance, L.P., data.
- 52 Based on the S&P 500 Index as of November 14, 2022 per Bloomberg Finance, L.P. data.
- 53 Based on the S&P 500 Index as of November 14, 2022 per Bloomberg Finance, L.P. data from 1995-2022.
- 54 Based on the MSCI ACWI Ex-US Index as of November 14, 2022 per Bloomberg Finance, L.P. data from 1995–2022.
- 55 Based on the S&P 500 Index as of November 14, 2022 per Bloomberg Finance, L.P., data.
- 56 Based on the MSCI ACWI Ex-US Index as of November 14, 2022 per Bloomberg Finance, L.P., data.
- 57 Price-to-Earnings, Price-to-Earnings-Next-Twelve-Months, Enterprise Value-to-EBITDA, Price-to-Sales, and Price-to-Book.
- 58 Based on the MSCI Emerging Market Index as of November 14, 2022 per FactSet.
- 59 Based on the MSCI Emerging Market Index as of November 14, 2022 per FactSet.
- 60 Based on the S&P 600 Small Cap Index as of November 14, 2022 per FactSet.
- 61 Based on the S&P 600 Small Cap Index as of November 14, 2022 per FactSet.
- 62 Based on the S&P 600 Small Cap Index and S&P 500 High Beta Index as of November 14, 2022 per Bloomberg Finance L.P., data.

- 63 Based on the S&P Semiconductor Select Industry Index and the S&P 500 Index as of November 14, 2022 per Bloomberg Finance, L.P., data.
- 64 Based on the S&P Semiconductor Select Industry Index as of November 14, 2022 per Bloomberg Finance, L.P., data.
- 65 Based on the S&P 500 Information Technology Index as of November 14, 2022 per Bloomberg Finance, L.P. data.
- 66 Based on the S&P Total Market Information Technology sector as of November 14, 2022 per Bloomberg Finance, L.P. data.
- 67 "US semiconductor fabs coming faster than you think", BofA Equity Research, November 4, 2022.
- 68 "US semiconductor fabs coming faster than you think", BofA Equity Research, November 4, 2022.
- 69 Based on the S&P Semiconductor Select Industry Index as of November 14, 2022 per Bloomberg Finance L.P., data.
- 70 Based on the Citi Real Effective USD Rate as of November 14, 2022 per Bloomberg Finance L.P., data.
- 71 Based on the Bloomberg EM Local Currency Government Diversified Index as of November 14, 2022 per Bloomberg Finance, L.P., data.
- 72 Based on the Bloomberg EM Local Currency Government Diversified Index as of November 14, 2022 per Bloomberg Finance, L.P., data.
- 73 Based on the Bloomberg EM Local Currency Government Diversified Index and the MSCI Emerging Market Currency Index as of November 14, 2022 per Bloomberg Finance L.P., data from 2008–2022.
- 74 Based on the Bloomberg EM Local Currency Government Diversified Index as of November 14, 2022 per Bloomberg Finance, L.P., data from 2008–2022.
- 75 Based on the ICE Exchange-Listed Fixed & Adjustable Rate Preferred Securities Index as of November 14, 2022 per Bloomberg Finance L.P., data.
- 76 Based on the ICE Exchange-Listed Fixed & Adjustable Rate Preferred Securities Index as of November 14, 2022 per Bloomberg Finance L.P., data.
- 77 Based on the ICE Exchange-Listed Fixed & Adjustable Rate Preferred Securities Index as of November 14, 2022 per Bloomberg Finance L.P. data.
- 78 Based on the underlying common equity of the holdings in the ICE Exchange-Listed Fixed & Adjustable Rate Preferred Securities Index as of November 14, 2022 per Bloomberg Finance, L.P.
- 79 Based on the ICE Exchange-Listed Fixed & Adjustable Rate Preferred Securities Index as of November 14, 2022 per Bloomberg Finance, L.P. data.
- 80 "Federal Reserve Board releases results of annual bank stress test, which show that banks continue to have strong capital levels, allowing them to continue lending to households and businesses during a severe recession," Federal Reserve, June 2022.
- 81 As of November 14, 2022 per Bloomberg Finance, L.P., data.

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Glossary

Basis Point (bps) A unit of measure for interest rates, investment performance, pricing of investment services and other percentages in finance. One basis point is equal to one-hundredth of 1 percent, or 0.01%.

Beta Measures the expected move in a stock relative to movements in the overall market. A beta greater than 1.0 suggests that the stock is more volatile than the broader market, and a beta less than 1.0 indicates a stock with lower volatility.

Bloomberg Global Aggregate Bond Index A benchmark that provides a broad-based measure of the global investment-grade fixed income markets. The three major components of this index are the U.S. Aggregate, the Pan-European Aggregate, and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds, Canadian government, agency and corporate securities, and USD investment-grade 144A securities.

Bloomberg Global Multiverse Bond

Index The index broadly tracks the global fixed-income bond market. It contains exposure to global investment grade and high yield fixed income securities as it is a union of the Bloomberg Global Aggregate and Global High-Yield indices.

Consumer Price Index (CPI) A widely used measure of inflation at the consumer level that helps evaluate changes in cost of living. The CPI is composed of a basket of consumer goods and services across the economy and is calculated by the US Department of Labor by assessing price changes in the basket of goods and services and averaging them. Core CPI is the same series, but excluding food and energy prices, which are considered to be volatile enough to distort the meaning and usefulness of so-called headline CPI. The absence of food and energy, means the core series reflects long-term inflation trends more accurately.

Credit Risk The potential for an investment loss based on the borrower's inability to repay a loan or meet other obligations. Credit risk is typically measured by credit ratings maintained by credit ratings agencies such as S&P, Moody's and Fitch.

Dividend Equity Investing A style of investing focused on owning companies or a portfolio of companies that make distributions and, in turn, reinvesting those dividends regularly with a view to slowly accumulating wealth over the long term.

Duration A commonly used measure, expressed in years, that measures the sensitivity of the price of a bond or a fixed-income portfolio to changes in interest rates or interest-rate expectations. The greater the duration, the greater the sensitivity to interest rates changes, and vice versa. Specifically, the specific duration figure indicates, on a percentage basis, by how much a portfolio of bonds will rise or fall when interest rates shift by 1 percentage point.

Earnings Before Interest, Taxes, Depreciation and Amortization

(EBITDA) An approximate measure of a corporation's operating cash flow that is used to analyze and compare profitability between companies and industries because it eliminates the effects of financing and accounting decisions.

Earnings Per Share (EPS) A profitability measure that is calculated by dividing a company's net income by the number of shares outstanding

Emerging Markets Developing countries where the characteristics of mature economies, such as political stability, market liquidity and accounting transparency, are beginning to manifest. Emerging market investments are generally expected to achieve higher returns than developed markets but are also accompanied by greater risk, decreasing their correlation to investments in developed markets.

Federal Funds Rate, or Federal Funds

Target Rate The overnight interest rate charged by depositary institutions on funds held at the Federal Reserve. The fed funds rate is set by the Fed's policy-making body, the Federal Open Market Committee, or FOMC.

Global Financial Crisis The economic crisis that occurred from 2007–2009 that is generally considered biggest economic challenge since the Great Depression of the 1930s. The GFC was triggered largely by the sub-prime mortgage crisis that led to the collapse of systemically vital US investment banks such as Lehman Brothers. The crisis began with the collapse of two Bear Stearns hedge funds in June 2007,

and the stabilization period began in late 2008 and continued until the end of 2009.

Inflation An overall increase in the price of an economy's goods and services during a given period, translating to a loss in purchasing power per unit of currency. Inflation generally occurs when growth of the money supply outpaces growth of the economy. Central banks attempt to limit inflation, and avoid deflation, in order to keep the economy running smoothly.

Percentile Ranking A system of ranking scores that shows the percentage of results that are lower than the benchmark or fund in question for the most recent three-year period. Every year, each score is updated with the most recent year's percentiles.

PMI Price Index ISM's manufacturing index, also known as the purchasing managers' index (PMI), is a monthly indicator of US economic activity based on a survey of purchasing managers at more than 300 manufacturing firms. It is considered to be a key indicator of the state of the U.S. economy.

Price-to-Book Ratio (P/B Ratio) A valuation metric that compares a company's current share price against its book value, or the value of all its assets minus intangible assets and liabilities. The P/B is a ratio of investor sentiment on the value of a stock to its actual value according to the Generally Accepted Accounting Principles (GAAP). A high P/B means either that investors have overvalued the company, or that its accountants have undervalued it.

Price-to-Cash-Flow Ratio A stock-valuation measure that is calculated by dividing a firm's cash flow per share into its current share price. Financial analysts often prefer to value stocks using cash flow rather than earnings because earnings are more easily manipulated.

Price-to-Forward Earnings Ratio The price of a security per share at a given time divided by its projected earnings per share over the coming year. A forward P/E ratio is a way to help determine a security's stock valuation — that is, the fair value of a stock in a perfect market. It is also a measure of expected, but not realized, growth

Sector Investing An investor or portfolio that invests assets into one or more sector of the economy such as financials, energy, or health care.

Small Cap Stocks Stocks with a relatively small market capitalizations — generally companies with market values of between \$300 million and \$2 billion. Small-cap stocks are more volatile than mid- or large-cap stocks, but tend to deliver higher returns over longer time periods.

S&P 500° Index A popular benchmark for U.S. large-cap equities that includes 500 companies from leading industries and captures approximately 80% coverage of available market capitalization.

Upside Capture Ratio A statistical measure of an investment manager's overall performance in up-markets. It is used to evaluate how well an investment manager performed relative to an index during periods when that index has risen.

Valuation The process of determining the current worth of an asset or a company.

Value One of the basic elements of "style"-focused investing that focuses on companies that may be priced below intrinsic value. The most commonly used methodology to assess value is by examining price-to-book (P/B) ratios, which compare a company's total market value with its assessed book value.

Volatility The tendency of a market index or security to jump around in price. Volatility is typically expressed as the annualized standard deviation of returns. In modern portfolio theory, securities with higher volatility are generally seen as riskier due to higher potential losses.

Yield The income produced by an investment, typically calculated as the interest received annually divided by the price of the investment. Yield comes from interest-bearing securities, such as bonds and dividend-paying stocks.

Yield to Worst The lowest potential yield that investors can expect when investing in a callable bond without the issuer defaulting.

Important Risk Information

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