

MEMBER OF THE M&T FAMILY

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Monthly investment analysis and insights from Wilmington Trust Investment Advisors

ON THE RECORD

Putting the Crystal Ball Back in the Drawer

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Investing is a profession that can resemble predicting the future. Investors are made to think they need a crystal ball, when of course, no crystal ball exists. In today's environment, even the most clairvoyant crystal ball would likely be cloudy. Instead, investing is about assessing probabilities of many micro and macro scenarios. Over the last few weeks, the probability we give to a soft-landing scenario has increased, while the probability of a mild recession remains uncomfortably high. The prospects for Europe's economy

have meaningfully improved. As a result, we have reduced our cash overweight in portfolios and deployed it into international developed equities. We retain a slight underweight to the asset class and equities more broadly, favoring U.S. over non-U.S. Additionally, we continue to hold some excess cash versus our strategic benchmark and an above-benchmark weight to investment-grade fixed income.

Europe catches a break

Looking back just a few months, Europe (Germany, in particular) was unequivocally staring down the barrel of a recession. The war in Ukraine—coming up on its February 24 one-year anniversary—had weaponized Europe's energy supply, and winter was coming. While natural gas storage levels had increased to 90%,¹ it was unclear if this would be enough to avoid rationing of energy by the industrial sector in the face of a harsh winter. Fast-forward three months and Europe has been blessed with a mild winter, preserving precious gas supplies, and maintaining storage levels of 80%. This improvement of circumstances has ushered in a recovery of confidence among consumers, businesses, and investors.

¹ Gas Infrastructure Europe, Deutsche Bank. Europe Thematic Research Strategy, January 20, 2023.

Figure 1

China activity reaccelerating

Daily subveny trips in major cities (7 day maying average, millions)



Global growth
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In addition, over this same period, China has made a rapid about-face on its zero-COVID policy, abandoning it, more or less, cold turkey. Cases have risen enormously, but supply chains continue to operate and mobility-based data show activity is resuming in China's cities (Figure 1). Global growth expectations are being revised up, with export-dependent economies in Europe, Japan, and other emerging markets the greatest beneficiaries.

Further dampening the headwinds to international equities—at least for American investors—is a reversal of the U.S. dollar. After strengthening by 17% between January and end-September 2022,² the fourth quarter brought a reassessment of relative monetary policy paths and global interest rates that has continued into January 2023. Since October, the dollar has depreciated by almost 10%. For U.S.-based investors, a weaker dollar boosts the currency-adjusted returns for international equities.

Given the rapidly improving facts on the ground, we have moved some cash into international developed equities. Make no mistake, risks remain, and we continue to hold a modest underweight to the asset class. International developed economies are unlikely to deliver robust growth over the next nine to 12 months even if a recession is averted. The war in Ukraine is a key risk, and NATO's latest round of military support for Ukraine along with warmer spring temperatures will likely bring an even more severe stage of fighting. Additionally, Europe's energy dependence still leaves the region vulnerable. Meanwhile, over in Japan, the central bank will inevitably have to start unwinding the most accommodative monetary policy in history. While this should push Japanese equities higher in U.S. dollar terms, a stronger yen would also present challenges or Japanese export-biased economy. These factors all point to volatility later this year for international equities.

² Represents a trade-weighted basket of currencies as measured by the DXY Currency Index. Source: Bloomberg, as of January 26, 2023.

³ Bloomberg.

Figure 2

M2 money supply contracts for the first time

Federal Reserve United States Money Supply (M2 Index, y/y)



If inflation slows rapidly enough to allow the Fed to cut rates in the second half of 2023 (as the market is pricing), then the U.S. could very well coast toward slower but still positive economic growth through this year.

Trying to land the plane

Turning to the U.S., rapidly cooling overall inflation increases the probability of a soft landing in 2023. Inflation of goods and housing is slowing meaningfully, and the money supply has contracted on a year-over-year basis—something that has not occurred since we have data going back to 19594 (Figure 2). Services inflation is proving stickier but is also expected to decelerate, bringing the headline CPI (Consumer Price Index) to around 3% by mid-2023. Wages are a critical component of services inflation, representing a higher share of overall costs for services-based companies than those in the manufacturing industry. We are tracking a deceleration in nominal wages (even while real, or inflation-adjusted, wages increase), but wage growth of 4.1% is still running above the long-term average of 3.0%. A structurally tight labor market—discussed in depth in our Capital Markets Forecast (CMF)—raises the likelihood that wage growth will remain firm. This by itself does not directly result in higher inflation, but absent an increase in productivity from abysmal levels, it certainly makes it more difficult to see core inflation reanchoring all the way back to the Fed's 2% target. The Federal Open Market Committee (FOMC) did meet on February 1, and raised the overnight fed funds rate by 25 basis points (0.25%) to a range of 4.50%-4.75%. We maintain the expectation that inflation will ultimately settle at 2.5%–3.5%, as expressed in our CMF, over the next few years.

In some ways, the U.S. economy is in a race against the inflation clock. If inflation slows rapidly enough to allow the Fed to cut rates in the second half of 2023 (as the market is pricing), then the U.S. could very well coast toward slower but still positive economic growth through this year. However, leading economic indicators are providing an ominous warning. The Conference Board's Leading Economic Index has never declined by this magnitude over a six-month period without a recession ensuing. Moreover, data from the Purchasing Manufacturing Index (PMI) indicate a

Continued

⁴ References the Federal Reserve's estimate of the total money supply. Sources: Federal Reserve, Bloomberg.

Figure 3

Yield curve remains deeply inverted at critcal slope measures

U.S. Treasury yield curve slopes: 10 year-2 year and 10 year-3 month slope



Corporate earnings
themselves could prove
troublesome for the markets
in coming quarters.

net percentage of surveyed purchasing managers are seeing current conditions deteriorate in services and, especially, manufacturing industries. Company leadership and consumer confidence has improved but remains depressed, a discouraging sign for capital expenditures growth and consumer spending. The yield curve, as measured by the difference between the 10-year Treasury yield and both the 3-month and 2-year yields, is deeply inverted (Figure 3).

Encouragingly, even in the case of a recession, we expect it to be short and shallow. Pockets of economic or market excess of sufficient magnitude to drag out the recovery of the economy outside the labor market are nowhere to be found. Household balance sheets appear relatively sound, with low debt-to-income ratios compared to history. Banks have been building reserves to protect against loan losses. At the same time, we speak with small business owners every day who are still struggling to find workers. Larger companies are making some very high-profile, though relatively small, layoff announcements, and initial jobless claims have fallen below 200,000 (the 2019 average for initial jobless claims was 219,000⁵). While an increase in the unemployment rate of more than 2%–3% is hard to fathom, a loss of perhaps one million to 1.5 million jobs could be coming. Such may be the required medicine to restore a healthier supply/demand balance in the labor market and sustainably bring wage inflation to acceptable levels. We estimate this outcome as roughly equal to a coin flip at this time. Indeed, only time will tell.

Corporate earnings themselves could prove troublesome for the markets in coming quarters. Companies in the technology, retail, and industrial sectors are guiding toward softer demand forecasts in 2023, and consensus expectations for S&P 500 earnings of \$2236 in 2023 still look too rosy, in our view. A 5%–10% earnings contraction means the 17x multiple on the S&P 500 (which is still only just in line

⁵ Bloomberg, Department of Labor.

⁶ Bloomberg.

Figure 5
High-net-worth portfolios with private markets*

		\leftarrow	
	Tactical tilts	- NEUTRAL +	Positioning
Equities	U.S. Large Cap	000 • 000	Underweight
	U.S. Small Cap	$000 \bullet 000$	
	International Developed	000000	
	Emerging Markets	000 • 000	
Fixed Income	Investment Grade	0000 • 00	Overweight
	Tax-Exempt High Yield	000•000	
Real Assets	Global REITs	000 • 000	Neutral
	Other/Commodities	000 • 000	
Alternatives	Equity Long/Short Hedge	000000	Underweight
Private Markets*	Equity/Debt/Real Estate	000 • 000	Neutral
Cash		0000•00	Overweight

Data as of February 1, 2023.

Positioning reflects our monthly tactical asset allocation (TAA) versus the long-term strategic asset allocation (SAA) benchmark. For an overview of our asset allocation strategies, please see the disclosures.

Corporate earnings
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with the 10-year average) could fall further. Profit margins are falling from their peak and, ironically, may be more difficult to protect in a falling inflation environment than a rising one. The next couple of quarters of earnings will be telling. Once we move into the second half of the year, earnings are projected to grow again, potentially ushering in a more sustainable rally for the equity market.

Investment opportunities

Despite a challenging and somewhat conflicting setup for the year, we are finding attractive investment opportunities. As mentioned above, at the asset class level, we are slightly underweight to equities, favoring U.S. over international developed (Figure 5). We hold a modest overweight to traditional defensive assets including cash and investment-grade fixed income. The municipal bond market looks particularly interesting. In 2022, municipal bonds saw record net outflows since \$116 billion. Going forward, maturities are expected to outstrip new issuance, while defaults in the asset class are typically very low, even in a recession. Rates are attractive, though down from the 2022 cycle highs. The inefficiency of this asset class lends itself to active management.

Within U.S. equities, we are increasing the quality exposure in portfolios. Quality can be defined as companies exhibiting high profitability, stable earnings, and low leverage. The quality factor has also shown higher excess returns during earnings contractions. Our focus on quality extends to both proprietary and third-party strategies. In addition, we expect a strategy that diversifies across both value

^{*} Private markets are only available to investors that meet Securities and Exchange Commission standards and are qualified and accredited. We recommend a strategic allocation to private markets we do not tactically adjust this asset class.

⁷ Refinitiv Lipper

and growth or focuses on GARP (growth at a reasonable price) to deliver better risk-adjusted returns than it did in either 2021 or 2022. Uncertainty is running high, but long-term investors should remain focused on what matters most: their objectives, individual circumstances, and time horizon. Our proprietary risk software, PARAGON™ (Portfolio Analysis, Risk Assessment & Goals Optimization), can provide valuable investment and planning insights in navigating this environment. Consider reaching out to your advisor for more information.

Rest

Uncertainty is running high.

Consider speaking to your advisor to schedule a review with our proprietary risk software called PARAGON $^{\text{TM}}$ (Portfolio Analysis, Risk Assessment & Goals Optimization).





ASSET CLASS OVERVIEW

Hedge Funds

Jordan Strauss, CFA, Senior Portfolio Manager **Jessica Blitz, CFA**, Research Analyst

	AS OF JANUARY 31, 2023		
	YTD	2022	2021
HFRX Global Hedge	1.67%	-4.41%	3.65%
HFRX Equity Hedge	1.56%	-3.18%	12.14%
HFRX Event Driven	2.31%	-7.27%	0.48%
HFRX Macro	0.03%	3.75%	-0.83%
HFRX Relative Value	2.30%	-7.72%	0.41%

Sources: Morningstar. Investing involves risks and you may incur a profit or a loss. Past performance cannot guarantee future results. Indices are not available for direct investment.

What we are seeing now

This commentary is based on observations built from a variety of data sources, including manager letters collected by Wilmington Trust and information published by prime brokerage units of Wall Street investment banks that track a large portion of the hedge fund industry. Returns of the HFRX indices noted above, though industry standard, do not adequately capture the full spectrum of fund returns across various strategies. The HFRX Equity Hedge Index, for instance, consists of only 16 funds that self-elect for inclusion, are open to new investors, and have at least \$50 million in assets. Typically, the HFRX has done a reasonable job of tracking industry performance, but in recent quarters, the HFRX has diverged greatly from the returns experienced by the average hedge fund investor.

After a challenging start to the year, hedge funds entered the second half of 2022 defensively positioned, and remained bearish through year end. This helped performance during the fourth quarter, which closed on a challenging note for equity markets. Because many hedge funds had de-grossed (reduced market exposure in both long and short books), relative returns for the month of December were much stronger than earlier in the year, when the average fund had higher gross exposure and suffered sizable losses during the market downturn and rotation away from growth stocks and into sectors traditionally considered value amid rate hikes and recessionary concerns.

The stratification of returns among strategies that was seen in the first half of the year continued through year end. As of the end of November, the median macro fund was significantly outperforming the median equity long/short fund, while event-driven funds also lagged as deal market activity fell off on economic concerns. Relative to public equities, though, the hedge fund industry broadly performed well in the fourth quarter. Among sector funds, techfocused funds continued to lag the broader market while energy funds, though down from peaks, continued to outperform.

December was the best month for long/short alpha in the last decade as longs and shorts both generated alpha relative to the market. Long/short alpha remains negative for the full year, driven by underperformance in the long book. Shorts were additive, underperforming the broader market.

What's changing

Unlike in prior quarters, hedge funds generally saw their gross exposure creep up slightly in December, as increases to short books made hedge funds modest net sellers of global equities. Long book exposure also increased, though to a lesser extent. North American equities saw the most activity, though Chinese equities generated interest as well. Most net selling was at the index level with buying tilting more toward single securities.

One exception was the continued net selling of TMT-related equities. Though the pace of tech stock sales slowed relative to previous months, it was consistent enough to push the TMT long/short ratio to lows not seen since prior to the pandemic-driven tech rally. Most of the selling was due to increased short positions, particularly in software, semis, and entertainment.

What we expect

In 2022 and in the COVID-19 selloff of March and April 2020, hedge funds were broadly able to generate a diversified return stream during challenging market conditions. While long-standing trends—performance dispersion, hedge fund market concentration, and fee compression—will continue to challenge the industry for the foreseeable future, we believe that with strong due diligence, investing in the right hedge fund can provide downside mitigation, as displayed during recent market contractions. With the environment uncertain as the new year begins in earnest, select funds should be well positioned to capitalize on volatility and stock market dispersion in the coming months.

Disclosures

Wilmington Trust is a registered service mark used in connection with various fiduciary and nonfiduciary services offered by certain subsidiaries of M&T Bank Corporation including, but not limited to, Manufacturers & Traders Trust Company (M&T Bank), Wilmington Trust Company (WTC) operating in Delaware only, Wilmington Trust, N.A. (WTNA), Wilmington Trust Investment Advisors, Inc. (WTIA), Wilmington Funds Management Corporation (WFMC), and Wilmington Trust Investment Management, LLC (WTIM). Such services include trustee, custodial, agency, investment management, and other services. International corporate and institutional services are offered through M&T Bank Corporation's international subsidiaries. Loans, credit cards, retail and business deposits, and other business and personal banking services and products are offered by M&T Bank, Member FDIC.

Wilmington Trust Investment Advisors, Inc., a subsidiary of M&T Bank, is a U.S. Securities & Exchange Commission-registered investment adviser providing investment management services to Wilmington Trust and M&T affiliates and clients. Registration with the SEC does not imply any level of skill or training. Additional Information about WTIA is also available on the SEC's website at https:// adviserinfo.sec.gov/.

The information in Capital Perspectives has been obtained from sources believed to be reliable, but its accuracy and completeness are not guaranteed. The opinions, estimates, and projections constitute the judgment of Wilmington Trust and are subject to change without notice. This commentary is for information 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 that any investment strategy is suitable for a specific investor. Investors should seek financial advice regarding the suitability of any investment strategy based on the investor's objectives, financial situation, and particular needs. The investments or investment strategies discussed herein may not be suitable for every investor. Diversification does not ensure a profit or guarantee against a loss. There is no assurance that any investment strategy will succeed.

These materials are based on public information. Facts and views presented in this report have not been reviewed by, and may not reflect information known to, professionals in other business areas of Wilmington Trust or M&T Bank who may provide or seek to provide financial services to entities referred to in this report. As a result, M&T Bank and Wilmington Trust do not disclose certain client relationships with, or compensation received from, such entities in their reports.

Any investment products discussed in this commentary are not insured by the FDIC or any other governmental agency, are not deposits of or other obligations of or guaranteed by M&T Bank, Wilmington Trust, or any other bank or entity, and are subject to risks, including a possible loss of the principal amount invested.

Some investment products may be available only to certain "qualified investors"—that is, investors who meet certain income and/or investable assets thresholds.

Alternative assets, such as strategies that invest in hedge funds, can present greater risk and are not suitable for all investors.

Any positioning information provided does not include all positions that were taken in client accounts and may not be representative of current positioning. It should not be assumed that the positions described are or will be profitable or that positions taken in the future will be profitable or will equal the performance of those described.

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 that will reduce returns.

An overview of our asset allocation strategies:

Wilmington Trust offers seven asset allocation models for taxable (high-net-worth) and tax-exempt (institutional) investors across five strategies reflecting a range of investment objectives and risk tolerances: Aggressive, Growth, Growth & Income, Income & Growth, and Conservative. The seven models are High-Net-Worth (HNW), HNW with Liquid Alternatives, HNW with Private Markets, HNW Tax Advantaged, Institutional, Institutional with Hedge LP, and Institutional with Private Markets. As the names imply, the strategies vary with the type and degree of exposure to hedge strategies and private market exposure, as well as with the focus on taxable or tax-exempt income.

Model Strategies may include exposure to the following asset classes: U.S. large-capitalization stocks, U.S. small-cap stocks, developed international stocks, emerging market stocks, U.S. and international real asset securities (including inflation-linked bonds and commodity-related and real estate-related securities). U.S. and international investment-grade bonds (corporate for Institutional or Tax Advantaged, municipal for other HNW), U.S. and international speculative grade (high-yield) corporate bonds and floating-rate notes, emerging markets debt, and cash equivalents. Model Strategies employing nontraditional hedge and private market investments will, naturally, carry those exposures as well. Each asset class carries a distinct set of risks, which should be reviewed and understood prior to investing.

Disclosures Continued

Allocations:

Each strategy group is constructed with target policy weights for each asset class. Wilmington Trust periodically adjusts the policy weights' target allocations and may shift from the target allocations within certain ranges. Such tactical allocation adjustments are generally considered on a monthly basis in response to market conditions.

The asset classes and their current proxies are:

- Large-cap U.S. stocks: Russell 1000® Index
- Small-cap U.S. stocks: Russell 2000® Index
- Developed international stocks: MSCI EAFE® (Net) Index
- Emerging market stocks: MSCI Emerging Markets Index
- U.S. inflation-linked bonds: Bloomberg US Treasury Inflation Notes TR Index Value Unhedged*
- International inflation-linked bonds: Bloomberg World ex US ILB (Hedged) Index
- Commodity-related securities: Bloomberg Commodity Index
- U.S. REITs: S&P US REIT Index
- International REITs: Dow Jones Global ex US Select RESI Index
- Private markets: S&P Listed Private Equity Index
- Hedge funds: HFRX Global Hedge Fund Index
- U.S. taxable, investment-grade bonds: Bloomberg U.S. Aggregate Index
- U.S. high-yield corporate bonds: Bloomberg U.S. Corporate High Yield Index
- U.S. municipal, investment-grade bonds: S&P Municipal Bond Index
- U.S. municipal high-yield bonds: 60% Bloomberg High Yield Municipal Bond Index / 40% Municipal Bond Index
- International taxable, investment-grade bonds:
 Bloomberg Global Aggregate ex US
- Emerging bond markets: Bloomberg EM USD Aggregate
- Cash equivalent: 30-day U.S. Treasury bill rate

All investments carry some degree of risk. Return volatility, as measured by standard deviation, of asset classes is often used as a proxy for illustrating risk. Volatility serves as a collective, quantitative estimate of risks present to varying degrees in the respective asset classes (e.g., liquidity, credit, and default risks). Certain types of risk may be underrepresented by this measure. Investors should develop a thorough understanding of the risks of any investment prior to committing funds.

Quality ratings are used to evaluate the likelihood of default by a bond issuer. Independent rating agencies, such as Moody's Investors Service and Standard & Poors, analyze the financial strength of each bond's issuer. Ratings range from Aaa or AAA (highest quality) to C or D (lowest quality). Bonds rated Baa3 or BBB and better are considered **Investment Grade**. Bonds rated Bal or BB and below are **Speculative Grade** (also **High Yield**.)

Paragon

Paragon® is a portfolio analysis, risk assessment, and goal optimization tool. The Paragon report uses hypothetical examples in conjunction with forecasts for inflation, economic growth, and asset class returns, volatility, and correlation and provides you with general financial planning information and to serve as one tool in helping you develop a strategy for pursuing your financial goals. It is not intended to provide specific legal, investment, accounting, tax or other professional advice. For specific advice on these aspects of your investments, you should consult your professional advisors.

Gold

The gold industry can be significantly affected by international monetary and political developments as well as supply and demand for gold and operational costs associated with mining.

ESG

A strategy that integrates environmental, social, and governance (ESG) factors into the investment process may avoid or sell investments that do not meet criteria set forth by the investment manager. Such investments may perform better than investments selected utilizing ESG factors.

DEFINITIONS

Alpha is a measure of performance on a riskadjusted basis. The excess return of a strategy relative to the return of the benchmark index is a strategy's alpha.

The Barclays U.S. Mortgage Backed Securities Index measures the performance of investment grade fixed-rate mortgage-backed pass-through securities of GNMA, FNMA, and FHLMC.

Basis points refers to a common unit of measure for interest rates and other percentages in finance. One basis point is equal to 1/100th of 1%, or 0.01%, or 0.0001, and is used to denote the percentage change in a financial instrument.

Beta is a measure of how an individual asset moves when the overall stock market increases or decreases. Thus, beta is a useful measure of the contribution of an individual asset to the risk of the market portfolio when it is added in small quantity.

The Bloomberg Agriculture Subindex Total Return (BCOMAGTR), formerly known as Dow Jones-UBS Agriculture Subindex Total Return (DJUBAGTR), is a commodity group subindex of the Bloomberg CITR composed of futures contracts on coffee, corn, cotton, soybeans, soybean oil, soybean meal, sugar and wheat and reflects the return on fully collateralized futures positions and is quoted in USD.

The Bloomberg Global Aggregate Bond Index measures the performance of global investment-grade fixed-rate debt markets, including the U.S., Pan-European, Asian-Pacific, Global Treasury, Eurodollar, Euro-Yen, Canadian, and investment-Grade 144A index-eligible securities.

The Bloomberg U.S. High Yield Corporate Index measures the performance of taxable, fixed-rate bonds issued by industrial, utility, and financial companies and rated below investment grade with at least one year until maturity and an outstanding par value of at least \$150 million.

The Bloomberg Commodity Total Return index (BCOMTR) is composed of futures contracts and reflects the returns on a fully collateralized investment in the BCOM and combines the returns of BCOM with the returns on cash collateral invested in 13 week (3 Month) U.S. Treasury Bills.

Disclosures Continued

The Bloomberg Dollar Spot Index

tracks the performance of a basket of 10 leading global currencies versus the U.S. Dollar. It has a dynamically updated composition and represents a diverse set of currencies that are important from trade and liquidity perspectives.

The Bloomberg Energy Subindex Total

Return (BCOMENTR), formerly known as Dow Jones-UBS Energy Subindex Total Return (DJUBENTR), is a commodity group subindex of the Bloomberg CITR composed of futures contracts on crude oil, heating oil, unleaded gasoline and natural gas and reflects the return on fully collateralized futures positions and is quoted in USD

The Bloomberg Industrial Metals Subindex Total Return Index (BCOMTNT),

formerly known as Dow Jones-UBS Industrial Metals Subindex Total Return (DJUBINTR), is a commodity group subindex of the Bloomberg CITR composed of longer-dated futures contracts on aluminum, copper, nickel and zinc and reflects the return on fully collateralized futures positions and is quoted in USD.

The Bloomberg Precious Metals Subindex Total Return (BCOMPRTR), formerly known as Dow Jones-UBS Precious Metals Subindex Total Return (DJUBPRTR), is a commodity group subindex of the Bloomberg CITR composed of futures contracts on gold and silver. It reflects the return on fully collateralized futures positions and is quoted in USD.

The Bloomberg US Credit Index measures the investment grade, US dollar-denominated, fixed-rate, taxable corporate and government related bond markets. It is composed of the US Corporate Index and a non-corporate component that includes foreign agencies, sovereigns, supranationals and local authorities.

The Bloomberg US Treasury US TIPS TR USD index measures the performance of rules-based, market value-weighted inflation-protected securities issued by the U.S. Treasury. It is a subset of the Bloomberg US Treasury Inflation-Linked Bond Index (Series-L), which measures the performance of the US Treasury Inflation Protected Securities (TIPS) market. Federal Reserve holdings of US TIPS are not index eligible and are excluded from the face amount outstanding of each bond in the index.

Consumer price index measures the price of consumer goods and how they're trending and is a tool for measuring how the economy as a whole is faring when it comes to inflation or deflation.

Drawdown measures the potential drop in portfolio asset values for the most recent stock market peak to the most recent stock market trough.

Duration risk is the risk associated with the sensitivity of a bond's price to a one percent change in interest rates. The higher a bond's duration, the greater its sensitivity to interest rates changes.

Equity risk premium is the extra return that's available to equity investors above the return they could get by investing in a riskless investment like T-Bills or T-Bonds or cash.

Event-driven hedge fund strategies

attempt to take advantage of temporary stock mispricing before or after a corporate event takes place. An event-driven strategy exploits the tendency of a company's stock price to suffer during a period of change.

The federal funds rate is the target overnight inter-bank lending interest rate set by the Fed.

Global intangible low-taxed income (GILTI) is a category of income that is earned abroad by U.S.-controlled foreign corporations (CFCs) and is subject to special treatment under the U.S. tax code.

Headline inflation is a measure of the total inflation within an economy, including commodities such as food and energy prices, which tend to be much more volatile and prone to inflationary spikes.

HFR* (**HedgeFundResearch**) **Indices** are the established global leader in the indexation, analysis and research of the hedge fund industry. They are broadly constructed indices designed to capture the breadth of hedge fund performance trends across all strategies and regions.

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

ISM Non-Manufacturing Index is an economic index based on surveys of more than 400 non-manufacturing (or services) firms' purchasing and supply executives and is part of the ISM Report On Business—Manufacturing (PMI) and Services

ISM Services Prices Paid Index is a diffusion index calculated by adding the percent of responses indicating they paid more for inputs plus one-half of those responding who paid the same; resulting in a single number that is seasonally adjusted.

LIBOR is the average interbank interest rate at which a selection of banks on the London money market are prepared to lend to one another.

Long, or a long position, describes an investor's expectation of a holding's future value. A position that the investor expects will rise in value and plans to hold for a long period of time is often described as "held long." It is the opposite of short, or a short position.

M2 money supply is a measure of the money supply that includes cash, checking deposits, and other types of deposits that are readily convertible to cash such as CDs.

Macro hedge fund strategies generally focus on financial instruments that are broad in scope and move based on systemic or market risk (not security specific). In general, portfolio managers who trade within the context of macro strategies focus on currency strategies, interest rates strategies, and stock index strategies.

MSCI AC Asia ex Japan Index captures largeand mid-cap representation across two of three developed markets countries (excluding Japan) and nine emerging markets countries in Asia. The index covers approximately 85% of the free float-adjusted market capitalization in each country.

MSCI All Country World Index (ACWI) is a stock index designed to track broad global equity-market performance. Maintained by Morgan Stanley Capital International (MSCI), the index comprises the stocks of about 3,000 companies from 23 developed countries and 26 emerging markets.

Disclosures Continued

MSCI China Index captures large- and mid-cap representation across China A shares, H shares, B shares, Red chips, P chips and foreign listings (e.g. ADRs). The index covers about 85% of this China equity universe. Currently, the index includes large-cap A and mid-cap A shares represented at 20% of their free float adjusted market capitalization.

MSCI EAFE Growth Index captures large- and mid-cap securities exhibiting overall growth style characteristics across developed markets countries around the world, excluding the U.S. and Canada.

MSCI EAFE Index is an equity index which captures large and mid-cap representation across 21 Developed Markets countries around the world, excluding the US and Canada. With 902 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

MSCI EAFE Value Index captures large- and mid-cap securities exhibiting overall value style characteristics across developed markets countries around the world, excluding the U.S. and Canada.

MSCI Emerging Markets Index captures large- and mid-cap representation across 26 emerging markets countries. The index covers approximately 85% of the free float-adjusted market capitalization in each country.

MSCI Europe Index captures large- and mid-cap representation across 15 developed markets (DM) countries in Europe. The index covers approximately 85% of the free float-adjusted market capitalization across the European DM equity universe.

MSCI Japan Index is designed to measure the performance of the large- and mid-cap segments of the Japanese market. The index covers approximately 85% of the free float-adjusted market capitalization in Japan.

MSCI United Kingdom Index is designed to measure the performance of the large- and mid-cap segments of the UK market. The index covers approximately 85% of the free float-adjusted market capitalization in the UK.

Price-to-earnings (P/E) ratio measures a company's current share price relative to its earnings per share (EPS).

Relative value hedge fund strategies

cover a variety of low-volatility trading strategies with the consistent theme of attempting to reduce market risk, i.e., the manager seeks to generate a profit regardless of which direction the markets are moving. All relative value strategies minimize market risk by taking offsetting long and short positions in related stocks, bonds, and other types of securities.

Russell 1000 Growth is a market capitalization-weighted index that measures the performance of the large-cap growth segment of U.S. equity securities; it includes the Russell 1000 index companies with higher price-to-book ratios and higher forecasted growth values.

Russell 1000 Value is a market capitalization-weighted index that measures the performance of the large-cap value segment of U.S. equity securities; it includes the Russell 1000 index companies with lower price-to-book ratios and lower expected growth values.

Russell 2000 Index measures the performance of approximately 2,000 smallest-cap American companies in the Russell 3000 Index, which is made up of 3,000 of the largest U.S. stocks.

S&P 500 index measures the stock performance of 500 large companies listed on stock exchanges in the U.S. and is one of the most commonly followed equity indices.

The S&P Developed Property index defines and measures the investable universe of publicly traded property companies domiciled in developed markets. The companies in the index are engaged in real estate related activities, such as property ownership, management, development, rental and investment.

Short, or short position, refers to a trading technique in which an investor sells a security with plans to buy it later; it is used when an investor expects the price of a security to fall in the short term.

Stagflation is persistent high inflation combined with high unemployment and stagnant demand in a country's economy.

Value sectors or stocks, generally refer to those trading at levels perceived to be below their fundamentals.

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