



# Capital Perspectives

Monthly investment analysis and insights from Wilmington Trust Investment Advisors

ON THE RECORD

## Battle of the Bulls vs. the Bears

In this issue:

<b>On the Record</b> Tony Roth	1
<b>Asset Class Overview: Hedge Funds</b> Jordan Strauss, CFA Jessica Blitz, CFA	7
<b>Investment Positioning</b>	8
<b>Disclosures</b>	10



**Tony Roth**  
Chief Investment Officer

Investors today are grappling with a very simple question: **Can the economy withstand the twin burdens of high inflation and tightening monetary policy to avoid a recession within the next 12-18 months? The answer is, obviously, not so simple. The room is divided, and violent day-to-day market swings show how tenuous that balance is between bulls and bears. We stand with the side expecting a growth slowdown but no recession, and will detail the reasons for our view and our degree of conviction. The punchline for portfolio positioning is that we remain fully invested in equities, underweight to bonds, and with a slightly elevated cash position that we are exercising patience in deploying.**

### The economic balance

The key to navigating this market and determining the likelihood of an economic soft landing is an understanding of whether inflation has peaked and how quickly it will decelerate. On the first point, we have increased confidence that inflation is in the process of peaking and will drop throughout the rest of the year. It is the second point, namely how fast it will come back to Earth, that is much more difficult to ascertain at this time.

### Peaking inflation

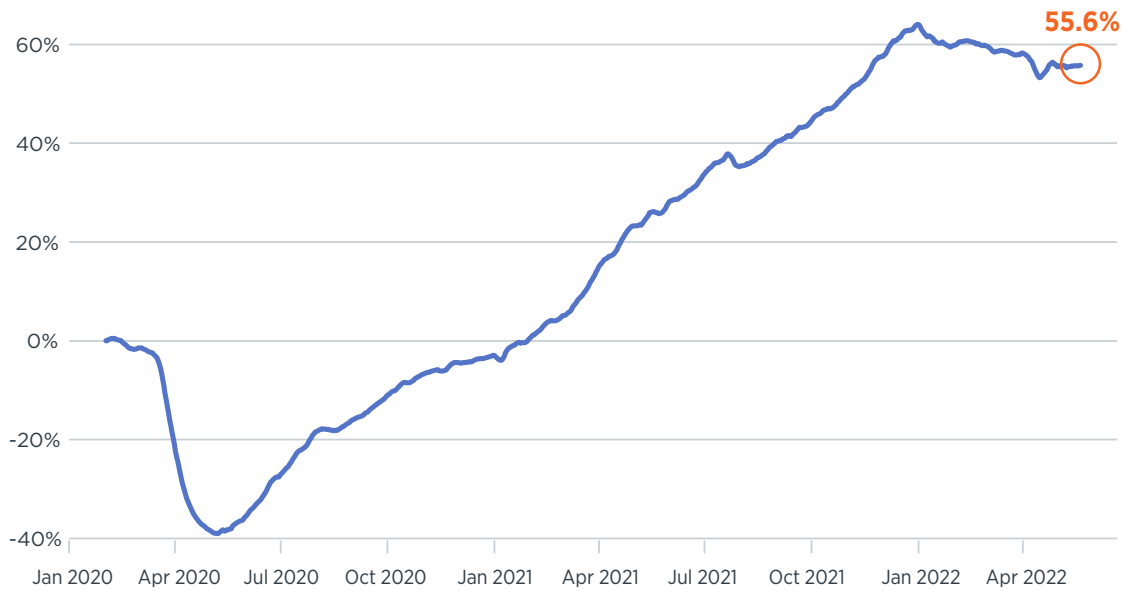
Signs of peaking inflation are emanating from both the supply and demand side. Wage growth has begun to moderate based on the 3-month moving average of hourly earnings. Job openings remain very high; there are two job openings for every unemployed person seeking work. However, data provided by the Bureau of Labor Statistics are provided with a two-month lag. A timelier indicator can be found in data from Indeed.com (Figure 1), where we see a leveling off of job

Continued

Figure 1

### Job openings have peaked

Percentage change of job vacancies



Data as of May 20, 2022.

Source: Indeed.com, Macrobond.

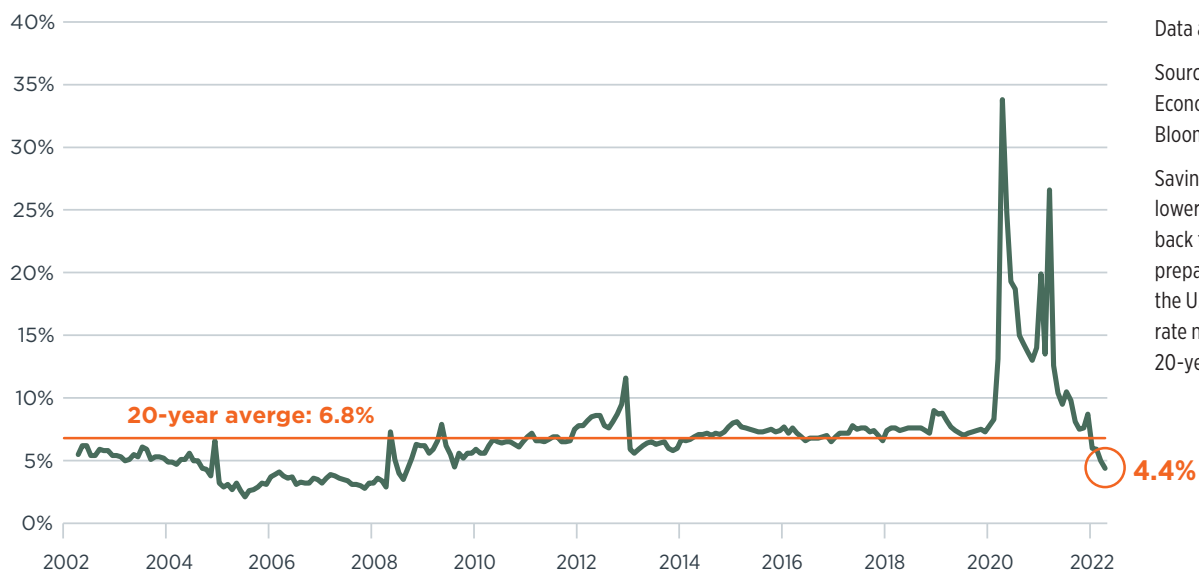
Indeed.com job postings indicator, total job postings (seasonally adjusted).

Line represents the percent change from pre-pandemic levels (February 2020).

Figure 2

### Savings rate has come crashing back down to Earth

U.S. personal savings as a % of disposable personal income



Data as of April 30, 2022.

Sources: Bureau of Economic Analysis, Bloomberg.

Savings levels for lower-income households back to or below prepandemic levels and the U.S. personal savings rate now well below the 20-year average.

postings. This suggests we will avoid the dreaded “wage-price spiral” that characterized the 1970s era of inflation.

The housing market and related shelter costs represent an outsized 32% of the Consumer Price Index (CPI) and, therefore, have a significant influence over the direction of inflation. Over the past year, 99% of zip codes in the U.S. saw home price appreciation, and the median price of a home sold in the U.S.<sup>1</sup> has increased 64%

<sup>1</sup> Source: National Association of Realtors, as of April 30, 2022.

Continued

**Our research indicates the most likely economic outcome is that consumer spending slows sufficiently to curb inflation but not enough to tip the economy into recession.**

during that time. Fortunately, the housing market is starting to cool due to a near-record ascension in mortgage rates. New home sales have fallen 29% since January 2022 while inventory has crept up—a sign that affordability and mortgage rates are slowing demand. The actual manifestation in inflation measures will take some time but will follow.

Consumer spending has remained resilient but is expected to abate. First-quarter earnings reports from major retailers reflected a clear shift in consumption from goods to services. Savings has also normalized, with savings levels for lower-income households back to or below prepandemic levels and the U.S. personal savings rate now well below the 20-year average (Figure 2).

### **Pace of deceleration**

What remains unclear is how quickly inflation is likely to decline. On this matter more time is needed to determine if inflation will fall fast enough to give the Federal Reserve (Fed) breathing room in the fall, or if it will stay sufficiently elevated to cause the Fed to continue to tighten policy aggressively through the end of the year. We project the CPI to fall to 4.5% by December, from 8.3% today. This is on the low end of consensus estimates,<sup>2</sup> and we acknowledge exogenous risks related to China's zero-tolerance COVID policy and the war in Ukraine—both of which continue to pressure supply-chain commodity prices. Typically, investors take their cue from the Fed and focus on core inflation, as monetary policy can do little to influence prices of food or energy. However, we feel headline inflation is as important to watch today as core, given the ever-rising burden of these commodity-related day-to-day purchases and what it could mean for consumers' propensity to pull back in other areas of discretionary purchases.

Our research indicates the most likely economic outcome is that consumer spending slows sufficiently to curb inflation but not enough to tip the economy into recession. We are fortunate that the economic momentum coming into the year was significant and gives considerable cushion for downgrading growth expectations. In fact, Bloomberg's median consensus estimate for 2022 GDP growth on January 1 was 4.5%; it has since fallen to 2.7%. This magnitude of growth reduction would cause a recession in any "normal" year of approximately 2% real GDP growth. Even after our own downward revisions, our economics team expects the U.S. to deliver growth of 2.4% this year.

### **Seeking refuge in markets**

Financial markets have delivered a lot of pain so far this year, with few areas of refuge outside of energy stocks or related commodities. We have been holding an above-benchmark cash position since March of this year and continue to look for the right opportunity to deploy this cash. Equities nearly reached bear market status in May, as defined by a market close 20% below the prior peak. A drawdown of this magnitude would account for 85% of the downside of the median recession going back to 1946 (Figure 3). However, the price-to-earnings ratio for the S&P 500 is still above the average since 1990, even with the 18% multiple contraction experienced

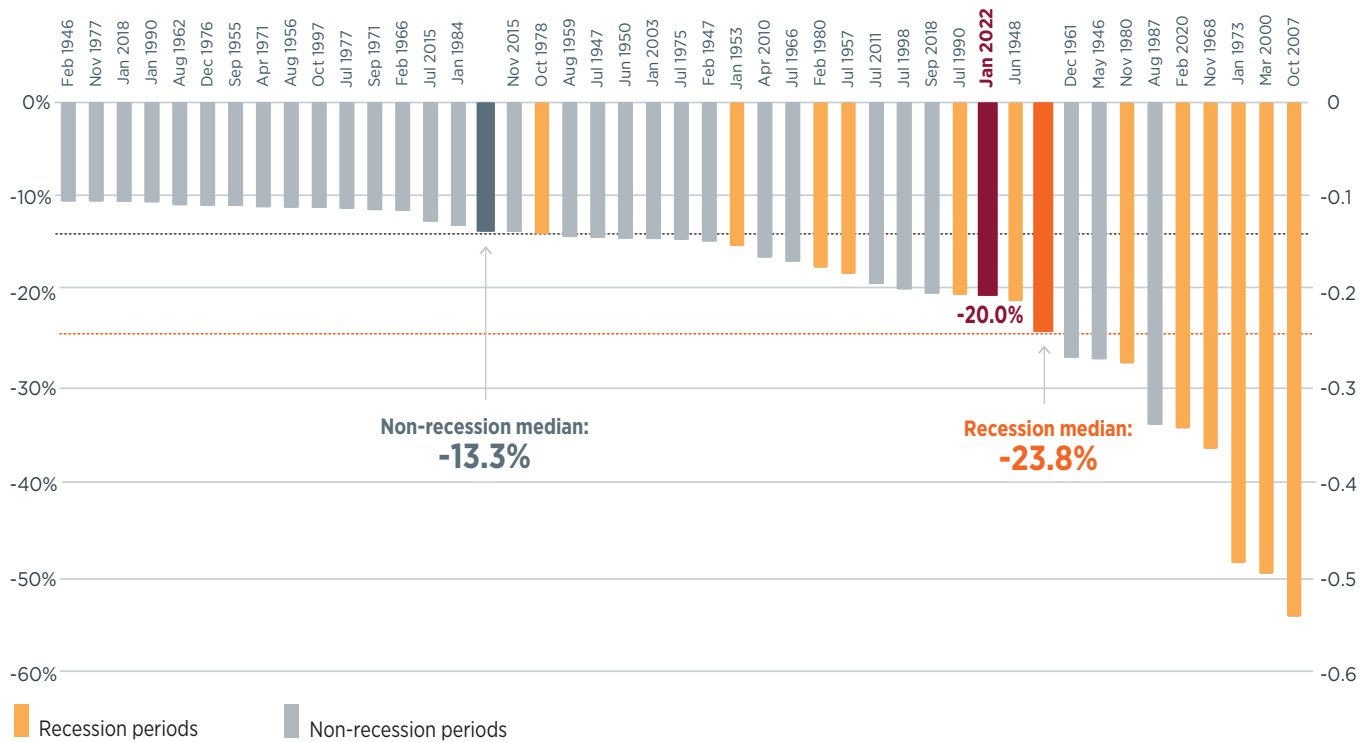
---

<sup>2</sup> Based on Bloomberg consensus estimates for quarterly CPI year-over-year (year over year, as of May 30, 2022).

Figure 3

**Markets have started to price recession**

Peak-to-trough drawdowns exceeding 10% since 1946



Source: Bloomberg.

Dates correspond to the start of the drawdown. Drawdowns represent the price change in the S&P 500 index.

**Financial markets have delivered a lot of pain so far this year, with few areas of refuge outside of energy stocks or related commodities.**

year to date. Defensive sectors such as utilities and consumer staples have been bid up by investors and are trading in the 98th and 83rd percentiles, respectively, based on the last 15 years of history. Our equity team expects further downward revisions to analyst estimates for earnings and profit margins as we move through the year.

Bond markets have also proven to be anything but safe due to a doubling of the 10-year Treasury yield in just 4 months and a 57-basis point (0.57%) widening of corporate credit spreads.<sup>3</sup> Yet, we believe the big moves in rates and spreads are now behind us for the year. At today's valuations, bond investors are collecting more income to better withstand any further modest increase in interest rates. For example, our fixed income analysts estimate that taxable bonds would deliver a positive return of approximately 1% if the 10-year Treasury were to increase by 50 basis points (0.50%) over the next year (assuming no further widening of credit spreads and a parallel shift upward in the curve).

**Playing the long (smart) game**

In volatile market environments, it can be tempting to exit holdings in stocks and bonds and wait to re-enter once the market calms. We wholeheartedly disagree with this approach. Timing the bottom of the market is a fruitless task. The market is likely to bottom in advance of any "all clear" from the economy and often puts in the

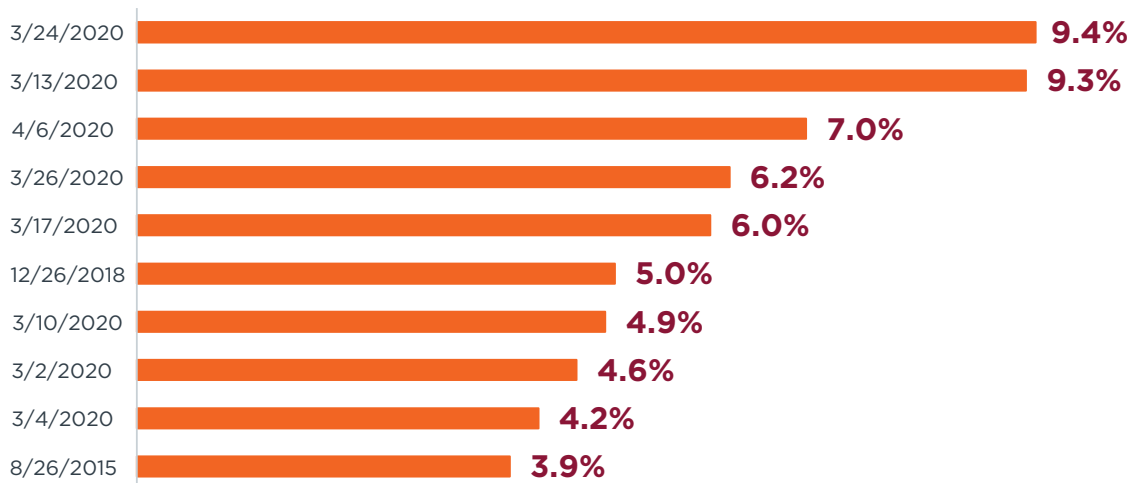
<sup>3</sup> Source: Bloomberg U.S. Aggregate Corporate Average Option-Adjusted Spread from December 31, 2021 through May 20, 2022.

Continued

Figure 4

### The sky is darkest just before dawn

Price return for the S&P 500's 10 best days since 2012



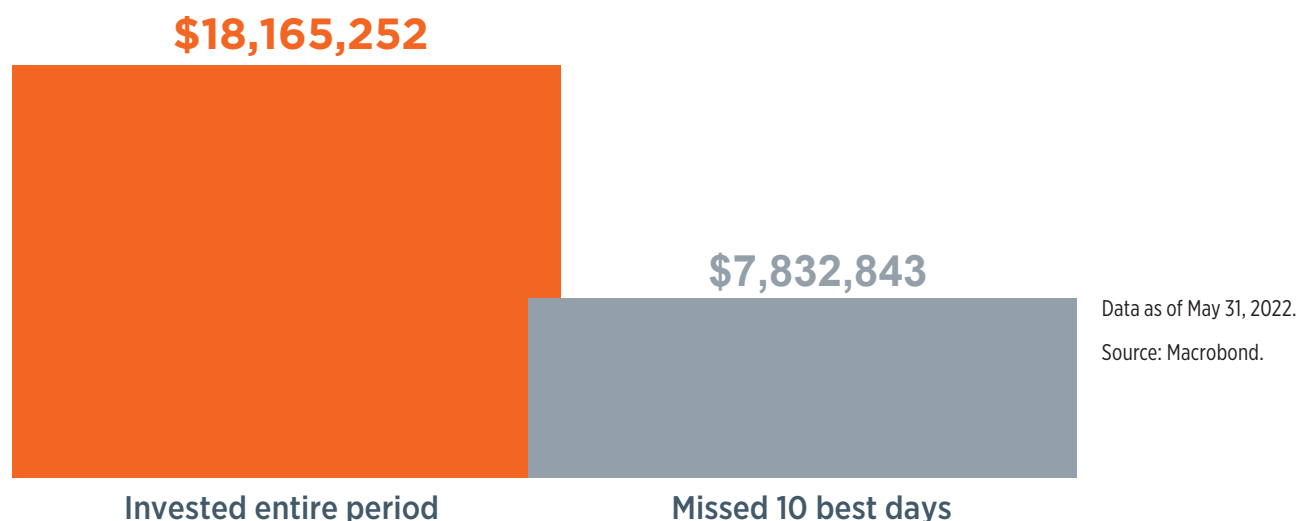
Data as of May 31, 2022 Source: Macrobond.

Investment in a security or strategy designed to replicate the performance of an index will incur expenses such as management fees and transaction costs which will reduce returns. Investing involves risks and you may incur a profit or a loss. There is no assurance that any investment strategy will be successful.

Figure 5

### Missing powerful market bounces can be detrimental for long-term wealth creation

Value of \$1 million invested in the S&P 500 index for 30 years



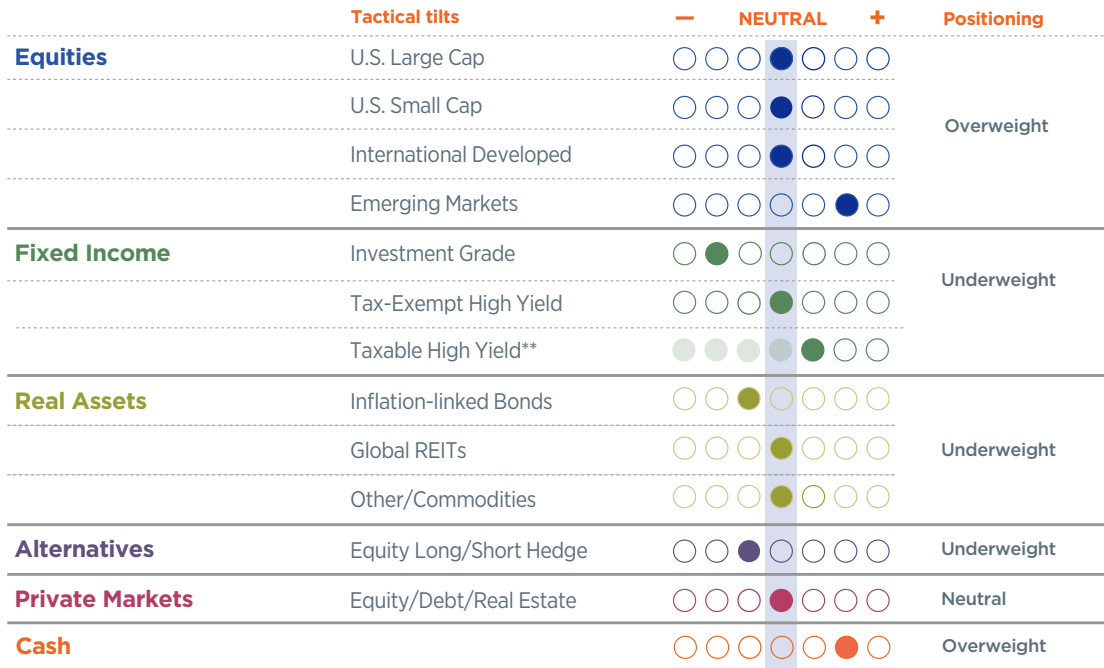
Data as of May 31, 2022.  
Source: Macrobond.

cycle low when conditions seem bleakest. On top of that, the market has historically yielded its best days in close succession to its worst, as evidenced by Figure 4. Eight of the 10 best days for the market in the last 10 years occurred in March of 2020. (We all remember what the environment felt like at that time.) The other two best days came on the heels of recessionary fears (in 2018) and financial pundits contemplating the next Asian currency crisis (2015). You would be forgiven for discounting the importance of just a few good days in the market, but missing these powerful market bounces can be detrimental for long-term wealth creation (Figure 5).

Continued

Figure 6

**High-net-worth portfolios with private markets\***



Data as of June 1, 2022.

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.

\*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.

\*\*Taxable high-yield bonds are not included in the strategic asset allocation benchmark for tax-sensitive portfolios primarily invested in municipal bonds. In this case, the Investment Committee saw an opportunity to invest in short-term, taxable leveraged loans (high yield) for both taxable and nontaxable portfolios.

We remain fully invested in portfolios, with a benchmark weight to U.S. and international developed equities, a slight overweight to emerging markets equities (given attractive relative valuations and prospects for an improving growth backdrop), and an underweight to investment-grade fixed income. Cash holdings could be deployed into either equities or bonds in coming months, depending on the evolving dynamics of inflation and the broader economy. Investment opportunities are always found at the intersection of the economic outlook and market pricing, and that is where we will continue to focus our attention.

Best,



## ASSET CLASS OVERVIEW

# Hedge Funds

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

AS OF MAY 31, 2022

	Month	YTD	Trailing 12-month return
Global	-1.09	-3.31	-3.01
Equity Hedge	-0.75	-2.76	2.27
Event Driven	-1.70	-4.23	-6.83
Macro	-0.90	1.87	-1.12
Relative Value	-0.97	-6.12	-6.21

Sources: FactSet, Bloomberg, HedgeFundResearch Indices. 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

*The commentary below is based on observations built from a variety of data sources, including manager letters collected by Wilmington Trust and information published by investment banks that together service and track a large portion of the hedge fund industry. The HFRX Index noted above, although industry standard, does not fully capture the full spectrum of fund returns across various strategies. The HFRX Equity Hedge Index, for instance, consists of only 17 funds that self-elect for inclusion, are open to new investors, and have at least \$50 million in assets. Typically, the HFRX does a reasonable job of tracking industry performance, but in 2021, the HFRX diverged greatly from the returns that were reaped by many investors in this space, with higher reported returns in Equity Hedge and lower reported returns in Event Driven and Relative Value.*

Global hedge funds as a whole had a solid quarter relative to long-only indices, capturing only 30% of the downside of the MSCI World and posting strong relative returns. Dispersion was elevated across strategies, with a highly challenging macro environment and increased volatility benefiting certain funds while trouncing others. The difference between the 95th percentile fund and the 5th percentile fund ended March at around 35%, compared to an average of 20% for the first quarter of the year since 2010.

Macro funds, specifically systemic macro funds, struggled through 2020 and 2021, but outperformed indices in early 2022, posting the strongest absolute returns. Quantitative strategies and multi-strategy funds also generated positive, though more muted, returns. Equity long/short funds were the worst-performing strategy for the quarter. The growth/value rotation in January driven by inflation and expected rate increase concerns, negatively impacted mainly long/short equity funds, especially tech/TMT and health care-focused funds, both of which had challenging quarters.

Negative long alpha continues to pressure overall fund returns, with global longs down over 8% more than the MSCI for the quarter.

Crowded longs, particularly in tech, communication services, consumer discretionary, and health care all suffered.

### What's changing

Net leverage was the key driver of performance within long/short funds, with lower-net managers posting the strongest relative returns for the quarter. Funds lessened their total market exposure over the quarter, with U.S. equity long/short net leverage hovering around 45%, far lower than the 60–65% net leverage levels maintained through 2021. Single-name long/short ratios decreased to the lowest level since 2020 as funds in general brought in their bullish tilts. Cautious positioning and increased cash holdings continued through April.

Investor sentiment remained more positive than the historic average in the quarter but fell relative to 2021 as crowded names and a generally growth-tilted industry suffered. Commodities and global macro funds saw the largest increase in interest, while equity long/short and emerging markets strategies saw interest decline. Overall, the hedge fund industry saw net inflows of approximately \$20 billion for the quarter, the largest since 2015 and the sixth time in the past seven quarters where flows were net positive.

### What we expect

We believe that major industry trends—emphasis on ESG considerations, performance dispersion, hedge fund market concentration, and fee compression—will continue for the foreseeable future. Despite near-term challenges in the asset class as a whole, top performers have generated consistently strong returns over one-, three-, and five-year periods. We think that with strong due diligence, investing in hedge funds has the potential to provide a diversified return stream for investors and downside mitigation as displayed during the height of the COVID-19 selloff in March and April 2020. With increased volatility in the equity markets today, we believe select hedge funds should be well positioned to strategically deploy capital in the coming months.

# Investment Positioning

Portfolio targets effective June 1, 2022, for high-net-worth clients with Hedge Funds

## Growth & Income

	Strategic Asset Allocation (long term)	Tactical Asset Allocation (short term)
<b>Equities</b>		
U.S. Large Cap	31.5%	Neutral
U.S. Small Cap	5.5%	Neutral
International Developed	16.0%	Neutral
Emerging Markets	5.5%	Overweight
<b>Fixed Income</b>		
U.S. Investment Grade-Tax-Exempt	28.5%	Underweight
High-Yield-Tax-Exempt	2.0%	Neutral
High-Yield-Taxable	0.0%	Overweight
<b>Real Assets</b>		
U.S. Inflation-Linked Bonds	1.0%	Underweight
Global REITs	1.5%	Neutral
Other	1.5%	Neutral
<b>Nontraditional Hedge</b>	5.0%	Underweight
<b>Cash &amp; Equivalents</b>	2.0%	Overweight
<b>Total</b>	<b>100.0%</b>	

Note: Totals may differ slightly from the allocation building blocks due to rounding.

**TAA**, or Tactical Asset Allocation, represents our *current recommendation* for each model strategy.

**SAA**, or Strategic Asset Allocation, represents our *current benchmark* allocation for each model strategy.

This material is for informational purposes only and is not intended as an offer or solicitation for the sale of any financial product or service or a recommendation or determination that any investment strategy is suitable for a specific investor. Opinions, estimates, and projections constitute the judgment of Wilmington Trust and are subject to change without notice. Allocations presume a long-term investment horizon. Wilmington Trust's 2022 Capital Markets Forecast is available on [www.wilmingtontrust.com/cmf-2022](http://www.wilmingtontrust.com/cmf-2022) or upon request from your Investment Advisor. There is no assurance that any investment strategy will be successful. Investing involves risks and you may incur a profit or a loss.

For an overview of our asset allocation strategies, please see the disclosures.

Source: WTIA.



# Investment Positioning

Portfolio targets effective June 1, 2022, for high-net-worth clients with Private Markets\*

## Growth & Income

	Strategic Asset Allocation (long term)	Tactical Asset Allocation (short term)
<b>Equities</b>		
U.S. Large Cap	24.3%	Neutral
U.S. Small Cap	4.3%	Neutral
International Developed	11.6%	Neutral
Emerging Markets	4.1%	Overweight
<b>Fixed Income</b>		
U.S. Investment Grade-Tax-Exempt	24.7%	Underweight
High-Yield-Tax-Exempt	2.0%	Neutral
High-Yield-Taxable	0.0%	Neutral
<b>Real Assets</b>		
U.S. Inflation-Linked Bonds	0.9%	Underweight
Global REITs	1.3%	Neutral
Other	1.3%	Neutral
<b>Nontraditional Hedge</b>	6.0%	Underweight
<b>Private Markets</b>	17.5%	Neutral
<b>Cash &amp; Equivalents</b>	2.0%	Overweight
<b>Total</b>	<b>100.0%</b>	

Note: Totals may differ slightly from the allocation building blocks due to rounding.

**TAA**, or Tactical Asset Allocation, represents our *current recommendation* for each model strategy.

**SAA**, or Strategic Asset Allocation, represents our *current benchmark* allocation for each model strategy.

\* Private markets are only available to investors that meet Securities and Exchange Commission standards and are qualified and accredited.

This material is for informational purposes only and is not intended as an offer or solicitation for the sale of any financial product or service or a recommendation or determination that any investment strategy is suitable for a specific investor. Opinions, estimates, and projections constitute the judgment of Wilmington Trust and are subject to change without notice. Allocations presume a long-term investment horizon. Wilmington Trust's 2022 Capital Markets Forecast is available on [www.wilmingtontrust.com/cmf-2022](http://www.wilmingtontrust.com/cmf-2022) or upon request from your Investment Advisor. There is no assurance that any investment strategy will be successful. Investing involves risks and you may incur a profit or a loss.

For an overview of our asset allocation strategies, please see the disclosures.

Source: WTIA.

# Disclosures

Wilmington Trust is a registered service mark used in connection with various fiduciary and non-fiduciary 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.**

Continued

# Disclosures Continued

## Allocations:

Each strategy is constructed with target weights for each asset class. Wilmington Trust periodically adjusts the target allocations and may shift away from the target allocations within certain ranges. Such tactical adjustments to allocations typically are 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/Barclays US Government ILB Index; international inflation-linked bonds: Bloomberg/Barclays World exUS ILB (Hedged) Index; commodity-related securities: Bloomberg Commodity Index; U.S. REITs: S&P US REIT Index; international REITs: Dow Jones Global exUS Select RESI Index; private markets: S&P Listed Private Equity Index; hedge funds: HFRI Fund of Funds Composite Index; U.S. taxable, investment-grade bonds: Bloomberg/Barclays U.S. Aggregate Index; U.S. high-yield corporate bonds: Bloomberg/Barclays U.S. Corporate High Yield Index; U.S. municipal, investment-grade bonds: S&P Municipal Bond Index; U.S. municipal high-yield bonds: Bloomberg/Barclays 60% High Yield Municipal Bond Index / 40% Municipal Bond Index; international taxable, investment-grade bonds: Bloomberg/Barclays Global Aggregate exUS; emerging bond markets: Bloomberg/Barclays EM USD Aggregate; and cash equivalents: 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 Ba1 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 risk-adjusted basis. The excess return of a strategy relative to the return of the benchmark index is a strategy's alpha.

**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 CTR 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 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.

**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 CTR 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

Continued

## Disclosures Continued

**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 (BCOMPRTT)**, formerly known as Dow Jones-UBS Precious Metals Subindex Total Return (DJUBPRTT), 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.

**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.

**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.

**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.

**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 large- and 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.

**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.

Continued

## Disclosures Continued

---

**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.

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

### **Limitations on use:**

This publication is intended to provide general information only and is not intended to provide specific investment, legal, tax, or accounting advice for any individual. Although information contained herein was prepared from sources believed to be reliable, Before acting on any information included in this publication you should consult with your professional advisor or attorney.

Third-party trademarks and brands are the property of their respective owners.

CFA® Institute marks are trademarks owned by the Chartered Financial Analyst® Institute.

Reference to the company names mentioned in this presentation is merely for explaining the market view and should not be construed as investment advice or investment recommendations of those companies.

The HFRX Fund of Funds Composite Index is being used under license from HFR Inc., which does not approve of or endorse any of the products or the contents discussed in this these materials. [www.HFR.com](http://www.HFR.com).