April 2022

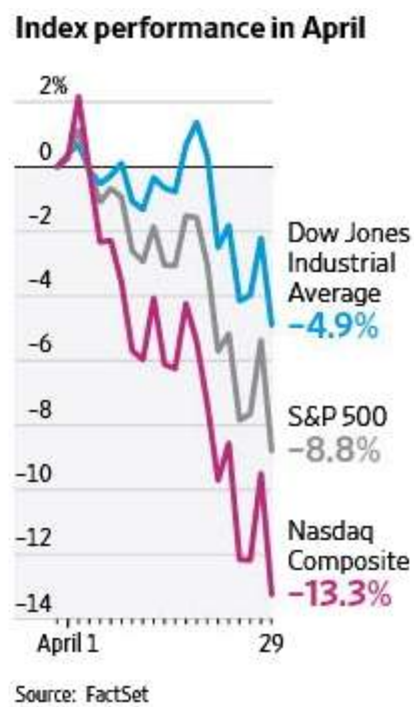
Sharing for the 6th time since 6/16/18: **"Being a value investor in the F.A.N.G. era is no fun at all.** - Patrick O'Shaugnessy

The lead from this weekend's WSJ:

Nasdaq Caps Worst Month Since 2008

BY GUNJAN BANERJI AND CAITLIN OSTROFF

An April rout in technology stocks deepened Friday, dragging the Nasdaq Composite to its worst monthly performance in more than a decade, as soaring inflation and rising interest rates fanned worries of a recession.



The broad selloff has erased trillions of dollars in market value from the tech-heavy gauge, with investors souring on shares of everything from software and semiconductor companies to social-media giants.

The Nasdaq dropped 4.2% Friday, bringing its losses for the month to more than 13%, its worst showing since October 2008. The index is down 21% in 2022, its worst start to a year on record, (and 23.2% from its 11/19/21 record high, while the Small Cap Russell 2000 is down 17% YTD, and 23.7% from its 11/8/21 all-time high.)

The broader S&P 500 has fallen for four consecutive weeks, shedding 8.8% in April and bringing its year-to-date losses to 13%. The Dow Jones Industrial Average fell 4.9% in April and is down more than 9% this year. Both indexes logged their worst months since March 2020.

The punishing declines in tech and growth stocks mark (Chart added below) a dramatic shift from recent years. Investors have ditched shares of some of the biggest tech companies, which had been stock-market darlings for

much of the past decade and propelled the indexes' gains from the pandemic lows.

Within just a few months, some of the most reliable winners morphed into losers. Netflix dropped 49% in April. Nvidia fell 32%. And PayPal Holdings declined 24%. All three stocks are down more than 35% in 2022.

Worries about the Federal Reserve raising interest rates, soaring inflation and the path of the economy have brought stocks sharply lower from the record levels at which they started the year. Many pandemic-era winners also have come falling back to earth as consumer tastes have evolved since 2020. And recently, earnings season has been dotted with some high-profile disappointments, delivering head-spinning one-day stock moves following the reports.

... The FAANG stocks (Chart added below), consisting of the popular quintet of Facebook parent Meta Platforms, Apple, Amazon.com, Netflix and Google parent Alphabet, collectively lost more than $1 trillion in market value in April, the most since Facebook started trading in May 2012.

... So far, corporate profits are on track to rise 7% for the quarter, according to FactSet, the lowest year-over-year earnings growth rate since the last quarter of 2020.

Amazon shares fell 14% on Friday, their biggest one-day drop since 2006, bringing their losses for the year to 26%. The company posted its first quarterly loss in seven years—a result that reflected broad economic trends related to a slump in online shopping, higher costs from inflation and supply-chain woes, and market jitters over electric-vehicle startups.

Apple cautioned Thursday that the resurgence of Covid-19 in China threatens to hinder sales by as much as $8

billion in the current quarter. Shares fell 3.7% Friday and have dropped 11% for the year. Last week, Netflix shares tumbled more than 30% in a single session after the earnings report showed the company lost subscribers. Moves in large technology companies can have outsize impacts on major stock indexes due to their higher weighting relative to other stocks.

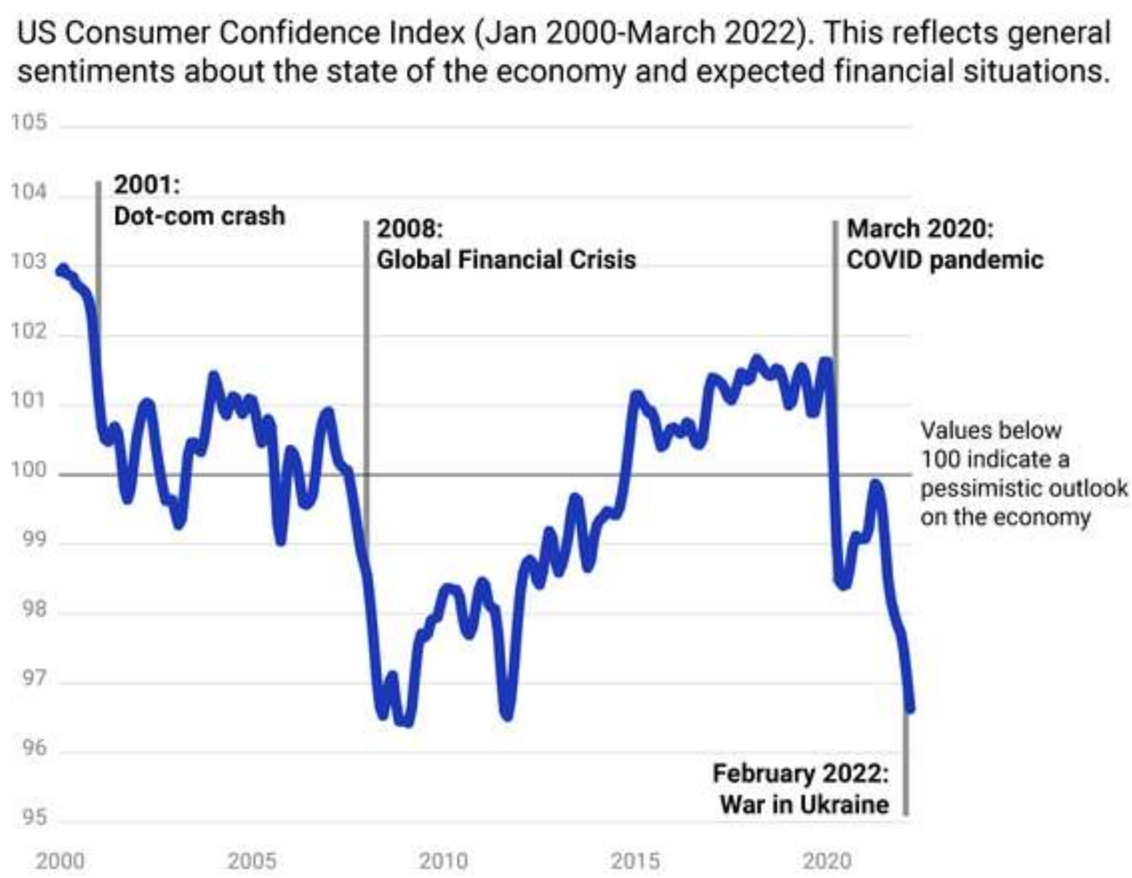
Also driving the volatility: Yields on traditionally safe government debt have rapidly climbed.

The yield on the benchmark 10-year Treasury note rose to 2.885% to end April, notching its biggest monthly gain since December 2009. These higher yields have dented the allure of tech and growth stocks, making shares of firms whose profits may lie further out in time less attractive.

For much of April, many traders and market watchers remained fixated on another matter: the drama surrounding Twitter. Tesla Chief Executive Elon Musk took a stake in the social-media company and then reached a deal to buy it. The negotiations throughout the process spurred intense volatility in shares of both companies. Twitter shares jumped 27% in April to lead the S&P 500, while Tesla shares shed 19%.

Many investors have grown more concerned about a recession, driving swings across global markets. The war in Ukraine has driven commodity prices higher when inflation has already been at a 40-year high. Meanwhile, the Fed faces an especially tricky path to tame inflation by lifting interest rates while not substantially raising unemployment.

"There's this massive escalation of recession fears," said Jim Paulsen, chief investment strategist at The Leuthold Group. "I think there's a lot more fear there than is probably necessary." ... (Chart below added from the 4/24 Signal)

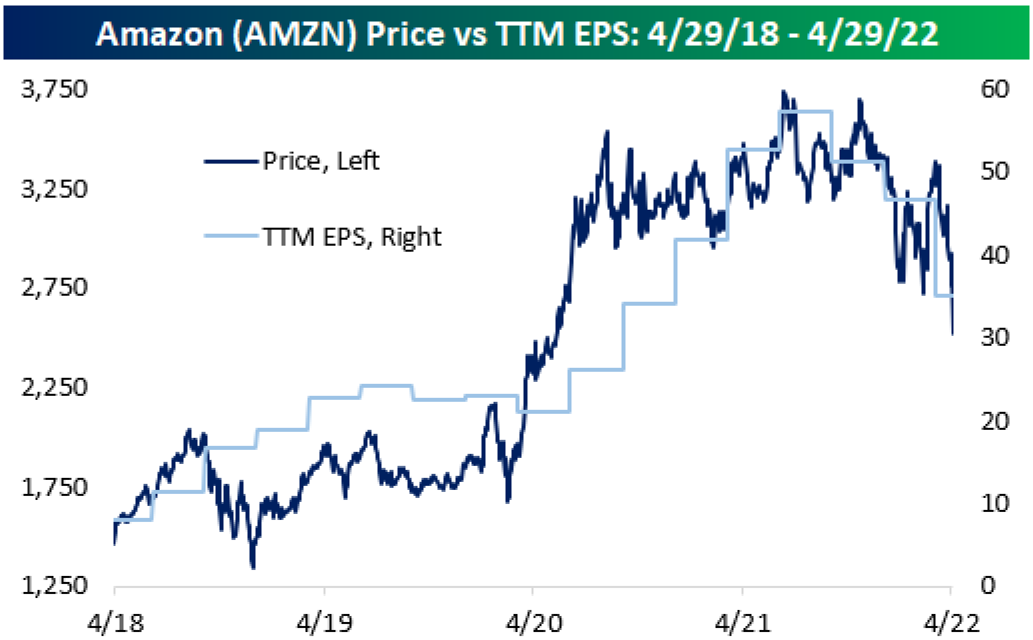


Three from Bespoke:

Amazon (AMZN) Shares Now Barely Up Post-COVID

Fri, Apr 29, 2022

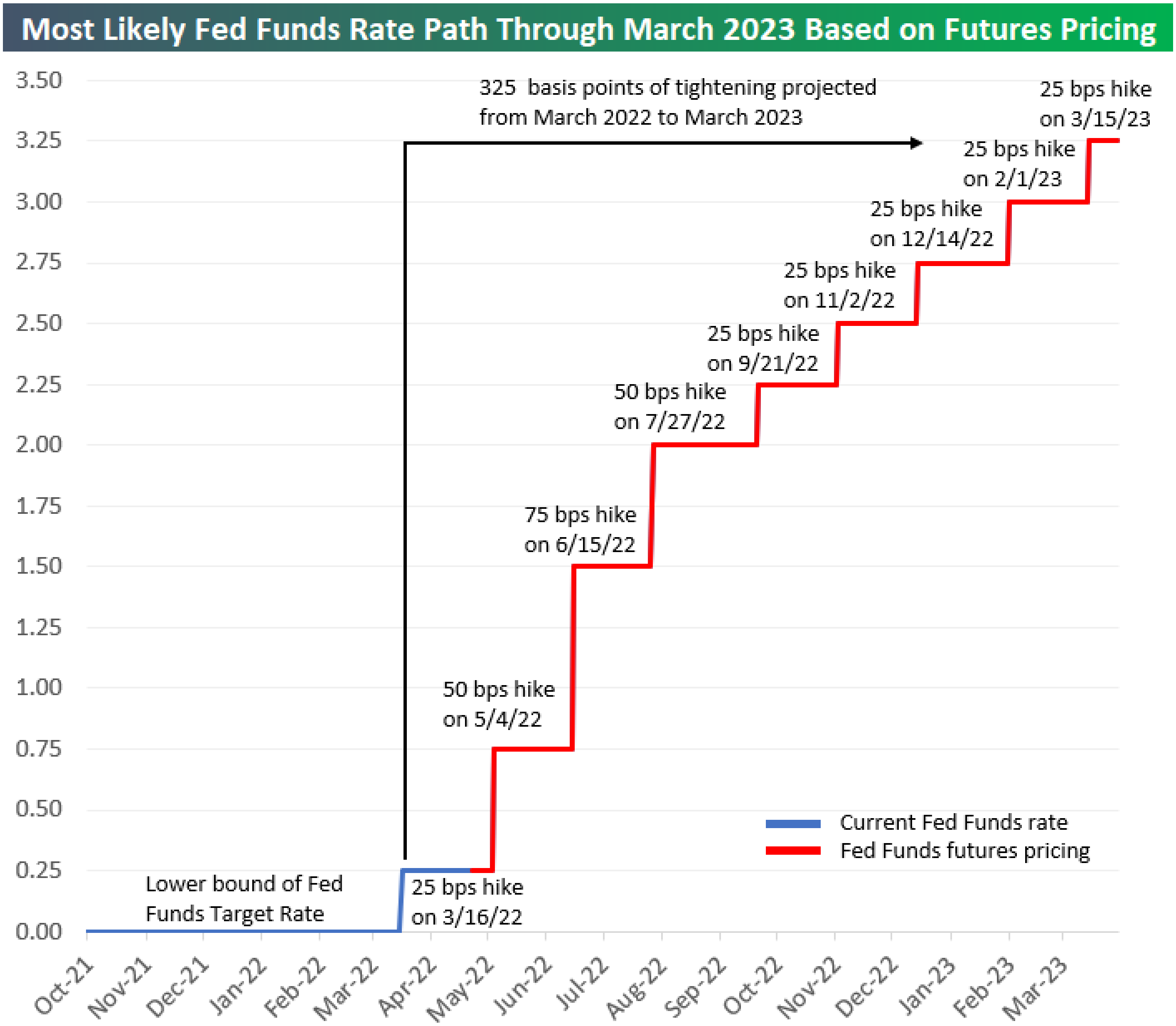
... In Q1 2020, AMZN posted operating margins of 9.5%. In Q1 2022, AMZN reported operating margins of 3.2%. These results can be attributed to inflationary pressures, labor challenges, supply chain constraints and foreign exchange headwinds. As you can see in the chart below, margin compression has hampered EPS, resulting in a decline in trailing 12-month EPS over the last three quarters. Relative to pre-pandemic levels, EPS have risen by 52.5% (CAGR: 21.1%), but they've declined by 38.8% over the last three quarters. ...



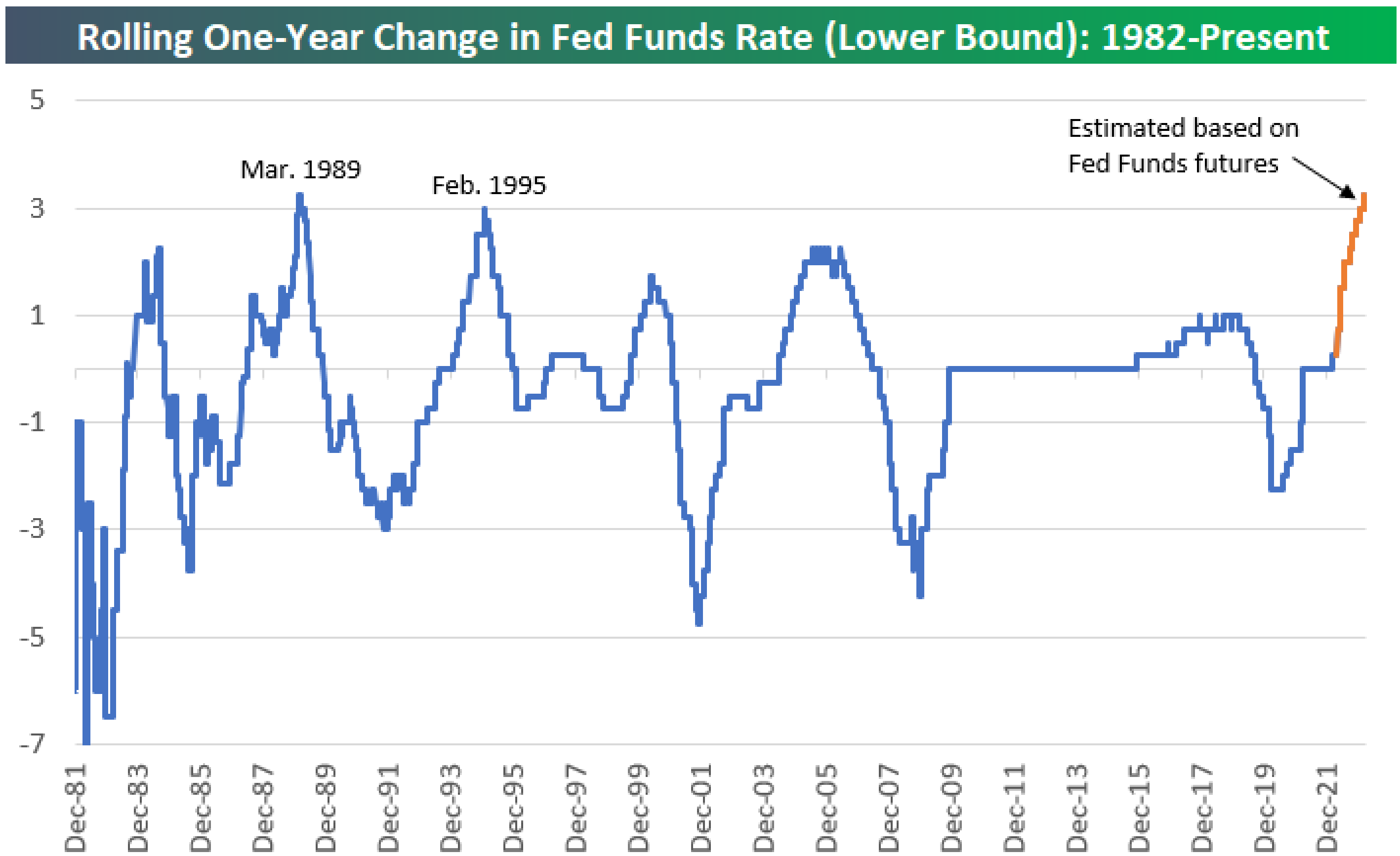
on 4/22:

Yesterday's market sell-off coincided with expectations for an even tighter Fed. As fed fund futures priced in a higher likelihood of tighter policy over the next year, equity prices fell. Below is a chart showing the expected path for the Fed Funds Rate (lower bound) through the March 2023 meeting. Pricing is now suggesting a 50 basis point hike at the May meeting, a ***75 basis point hike*** at the June meeting, and another 50 basis point hike at the July meeting. That would take the Fed Funds Rate up to 2-2.25% (remember, it's at just 0.25-0.50% now) by mid-July. Talk about a *tight* summer!

After the estimated 175 basis points of tightening through July, markets are pricing in five more consecutive 25 basis point hikes through March 2023, which would leave the lower bound of the Fed Funds Rate at 3.25%.



If we do see a Fed Funds Rate of 3.25-3.50% by next March, it will be tied for the steepest one-year of tightening since 1989:



on 4/14:

Which Equity Sectors Can Combat Higher Inflation?

Some investors are worried about inflation's impact on equities. We look at which equity sectors could prove to be the most resilient.

Insight from sub-adviser Schroders Investment Management

Sean Markowicz, CFA
Strategist, Research and Analytics

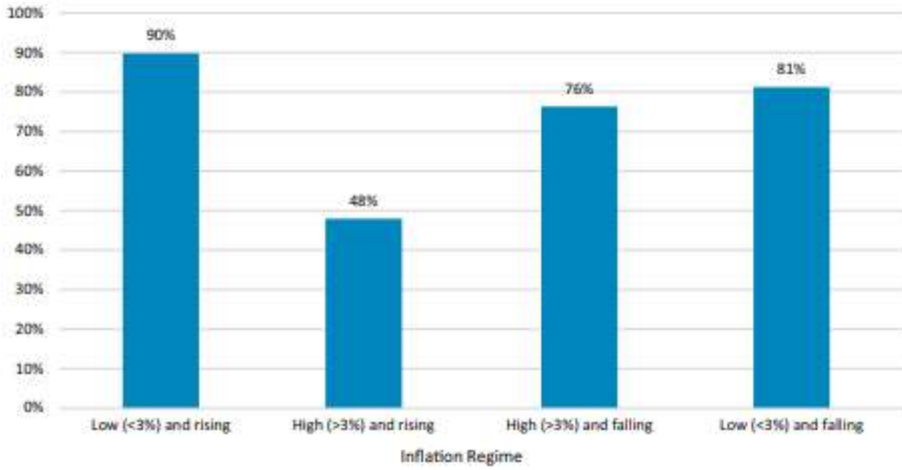
The sharp rise in bond yields over recent weeks has rattled equity markets amid the emerging consensus that fiscal stimulus, combined with post-pandemic supply shortages and surges in consumer demand, has contributed to higher inflation. Five-year inflation expectations, as measured by the yield difference between nominal and inflation-protected US Treasury bonds, have rebounded sharply from their pandemic lows and are now at 2.78%—nearing their highest level since 2005.

Moderate inflation is generally good for equities because it tends to be associated with positive economic growth, rising profits, and stock price gains. However, things can quickly turn ugly for stock-market investors if the economy overheats and inflation rises too high.

Our research has found that equities outperformed inflation 90% of the time when inflation has been low (below 3% on average) and rising. But when inflation was high (above 3% on average) and rising, equities fared no better than a coin toss, as shown in the chart to the right.

FIGURE 1

% of Rolling 12-Month Periods When US Equity Returns Exceeded Inflation Rate, 1973-2021



Past performance does not guarantee future results. Data from March 1973–December 2021. Based on monthly 12-month returns in excess of US CPI inflation rate. Low/high inflation defined as periods when year/year % change in US CPI is below/above average over last 12 months. Rising inflation is defined as the absolute change in the inflation rate over the last 12 months. Based on MSCI USA Index. The Consumer Price Index (CPI) is a measure of change in consumer prices as determined by the US Bureau of Labor Statistics. MSCI USA Index is a free float-adjusted market-capitalization index that is designed to measure the performance of the large- and mid-cap segments of the US market. Sources: Refinitiv Datastream and Schroders, as of 12/21.

Fortunately, not all sectors are equally affected and some may prove more resilient than others if current inflation rates remain elevated.

What Is the Relationship Between Equity Prices and Inflation?

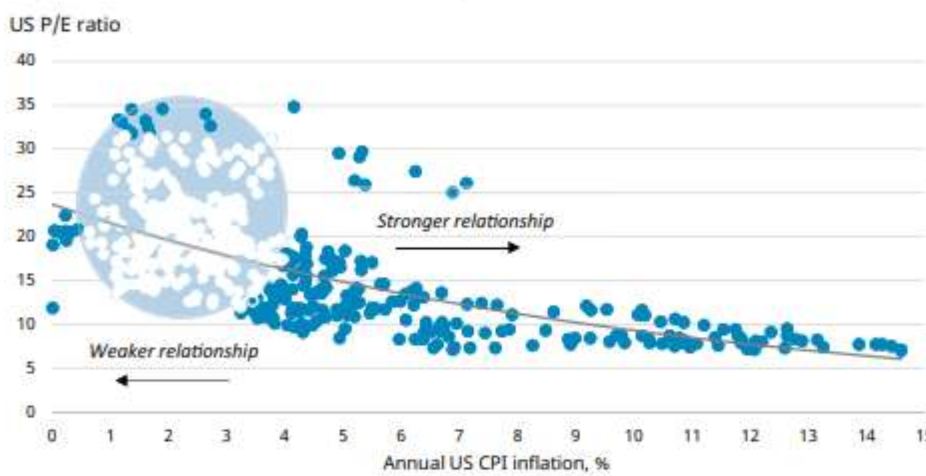
In theory, equities should offer a buffer against inflation because a rise in prices should correspond to a rise in nominal revenues and, therefore, boost share prices. On the other hand, this may be offset by a contraction in profit margins given an increase in companies' input costs.

In practice, the impact of inflation on earnings will vary by economic sector and its ability to pass on higher input costs to consumers. But as long as input costs don't increase at the same rate as revenues, the rise in profit margins could translate into greater nominal earnings.

The problem is that the market will often discount those future cash flows at a higher interest rate when inflation rises to compensate for the fact they're worth less in today's money. All else being equal, the higher the level of inflation, the greater the discount rate1 applied to earnings and, therefore, the lower the price-to-earnings (P/E) ratio investors are prepared to pay (**FIGURE 2**).

FIGURE 2

High Inflation Tends to Hurt P/E Multiples



Past performance does not guarantee future results. Sources: Refinitiv Datastream and Schroders. Data from March 1973–December 2021.

Note, however, that the relationship is more ambiguous at low levels of inflation (e.g., below 3%), situations in which other factors may be driving valuations.

Which Equity Sectors May Offer Shelter Against Rising Inflation?

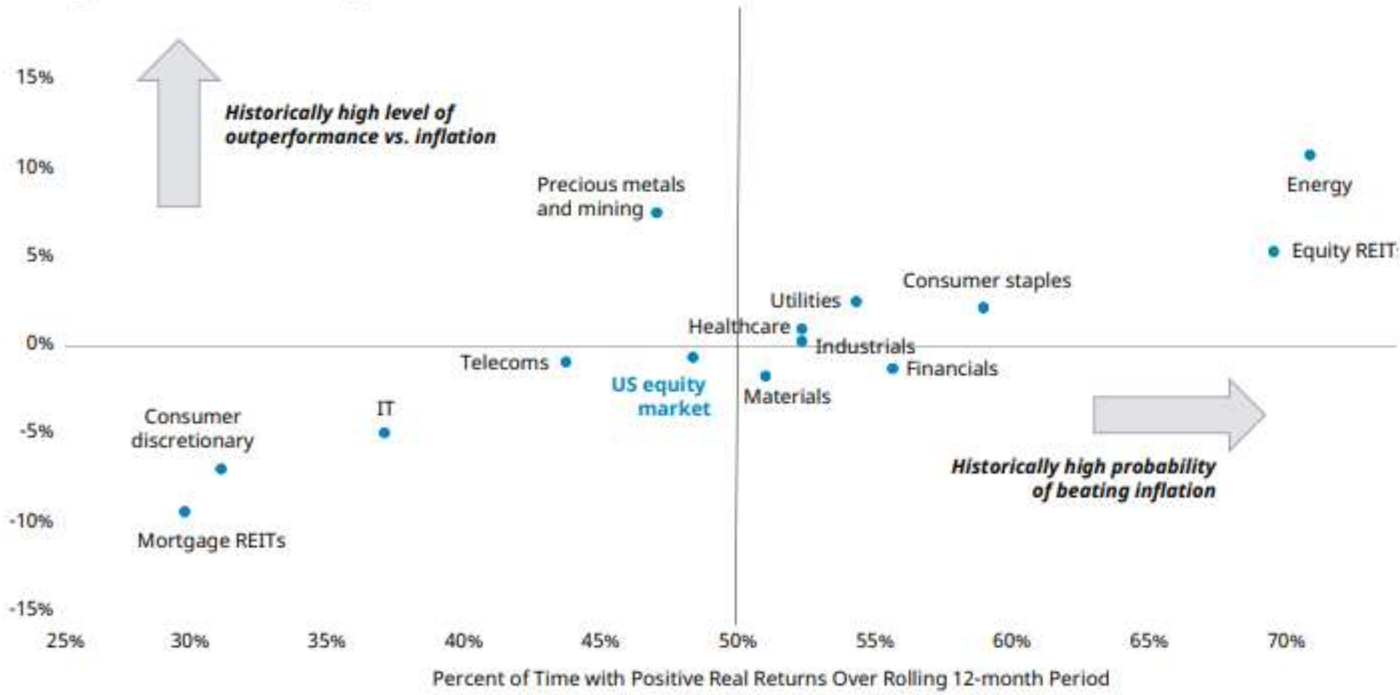
A potential inflation hedge is an investment that can mitigate the impact of price increases. So how often do different equity sectors achieve this and how well does it work?

That's illustrated in **FIGURE 3**. The x-axis shows the percentage of rolling 12-month periods since 1973 in which equity returns exceeded inflation in high and rising inflation environments—a measure of how consistently each sector has beaten inflation in these environments.

FIGURE 3

US Equity Sector Performance in High (+3% on Average) and Rising Inflation Environments, 1973-2021

Average 12-month inflation-adjusted return, %



Past performance does not guarantee future results. Investors cannot directly invest directly in an index. Based on monthly rolling 12-month returns in excess of US CPI inflation rate. High inflation is defined as periods where year-over-year percent change in US CPI is above 3% on average over last 12 months. Rising inflation is defined as the absolute change in the inflation rate over last 12 months. All sectors proxied using US Datastream indices, except real estate, which is proxied using the FTSE Nareit All Equity REITs Index and FTSE Nareit Mortgage REITs Index.[3] Sources: Refinitiv Datastream and Schroders. Data from March 1973–December 2021.

The y-axis shows the real (inflation-adjusted) return achieved during those periods—a measure of how much they have beaten inflation by, on average, in these environments.

Although equities in general have performed quite poorly in high and rising inflation environments, there are potential areas that have historically performed better at the sector level. The energy sector (which our clients are overweight), which includes oil and gas companies, is one of them. Such firms beat inflation 71% of the time and delivered an annual real return of 9.0% per year on average.

This is a fairly intuitive result. The revenues of energy stocks are naturally tied to energy prices, a key component of inflation indices. So by definition, they generally have performed well when inflation rises.

Equity REITs (real-estate investment trusts) (which our clients investing in individual stocks are also overweight) may also help mitigate the impact of rising inflation. They outperformed inflation 67% of the time and posted an average real return of 4.7%. This makes sense too. Equity REITs own real-estate assets and may provide a partial inflation hedge via the pass-through of price increases in rental contracts and property prices.

In contrast, mortgage REITs, which invest in mortgages, are among the worstperforming sectors. Just like bonds, their coupon payments generally become less valuable as inflation increases, sending their yields higher and prices lower to compensate.

The same is true of promised future growth in profits for information-technology stocks. The bulk of their cash flows are expected to arrive in the distant future, which may be worth far less in today's money when inflation increases. Financials, on the other hand, have performed comparatively better, as their cash flows tend to be concentrated in the shorter term.

But high inflation can still be especially harmful for banks because it erodes the present value of existing loans that will be paid back in the future.

Utility stocks display a somewhat disappointing success rate of 50%. As natural monopolies, they should be able to pass on cost increases to consumers to maintain profit margins. However, in practice, regulation often prevents them from fully doing so.

What's more, given the stable nature of their business and dividend payments, utility stocks are often traded as "bond proxies," meaning they might be bid down relative to other sectors when inflation takes off (and bond prices fall).

Meanwhile, although gold is often touted as a hedge against currency-debasement fears, the track record for companies in the precious-metals and mining sector is mixed.

On average, such firms posted an average real return of 8.0% in high and rising inflation environments. But the likelihood of this happening was akin to a coin toss—they beat inflation only 47% of the time, considerably less than many other sectors.

In summary, if the current inflationary uptick continues, equity prices could stay volatile. But some sectors may absorb the impact better and others are even poised to benefit.

From Morningstar:

Real News, Fake Understanding

The danger to investors of listening selectively.

John Rekenthaler
Apr 14, 2022

Strange Thoughts

Behavioral researchers have cataloged dozens of ways in which people are predictably irrational (I cover 15 emotional and cognitive biases in the Investment class I teach at OU, which are foundational to an understanding of Behavioral Finance and proper investing more broadly). To begin with the ABCs, the "availability bias" explains why respondents expect unlikely events to repeat, the "bandwagon effect" describes how they favor opinions that have become more popular, and the "commitment bias" discusses why they cling so fiercely to their established views. (The remaining letters are also amply covered.)

Such quirks, of course, also apply to investment analysis. This column addresses two such tendencies: 1) the public's interest in investment winners rather than losers; and 2) its attraction to bad economic news rather than to positive results.

Happy Talk

With individual securities, investors seek success stories. To be sure, habits can change. During the 1980s and 1990s, a host of investment magazines plastered "fund manager of the month" on their covers—a practice, one must confess, that Morningstar emulated, by publishing interviews and profiles. Such features have since disappeared. For one, most of those magazines have folded. For another, index funds have killed the mystique of the star mutual fund manager.

But the desire to hear about those who have won the investment lottery repeatedly resurfaces. Today, it appears in the form of meme stocks, cryptocurrencies, and nonfungible tokens. (Also gaining popularity have been online gaming and sports gambling, which satisfy similar impulses.) The impulse even found its way to an exchange-traded fund: ARK Innovation ETF (ARKK).

While it's true that investment publications cater to this taste, it should also be acknowledged that when doing so, they follow their readers' wishes. For example, Morningstar has sometimes been criticized for awarding many more funds with its highest Morningstar Analyst Rating of Gold than with its lowest rating of Negative. That tendency exists for a reason. Morningstar's readers request research on funds that have performed well. Those that have not, they rarely investigate. By and large, the fund analyst who produces a Negative report writes to him or herself.

My columns receive similar responses. When I publish "best of" articles, they attract high traffic. When I write about what to avoid, those columns typically languish. Most readers are uninterested. They would like to know more about what they should buy, not what they should avoid.

Prophets of Doom

The opposite pattern occurs with broad investment issues. Consider, for example, pension plans. As this tweet states, over the past decade "thousands of op-eds" have bemoaned that pension plans were "living beyond [their] means." However, per the actuarial consulting firm Milliman, the funded ratio for the 100 largest corporate pension plans is now a comfortable 105%. Public pensions have fared less well, showing an average ratio of 85.5%, but that figure has nevertheless risen by 15 percentage points in recent years. The media's reaction? Silence.

It may well be that pension funds' improvement is only temporary, buoyed by equity gains. Perhaps. But that precept applies in both directions. Just as today's ratios owe in large part to the stock market's recent performance, so did last decade's figures. Yet only the unhappier outcome has been widely circulated. Few, if any, op-ed essays have celebrated the recovery of pension plans.

We can safely generalize this principle: When financial issues make the everyday headlines, they usually consist of troubles, such as rising inflation, soaring unemployment, or stock-market crashes. This resembles the approach of local newscasts, which subsist on fires, shootings, and lootings. With securities, investors wish to read about winners. With the broader economy, they prefer disasters.

Unintended Consequences

This barrage of negativity discourages stock-market participation. On the surface, the participation numbers are encouraging. Slightly more than half of American households own stocks, usually indirectly through mutual funds or ETFs. However, that percentage drops dramatically when 401(k) accounts are excluded. In addition, when the Federal Reserve Bank of St. Louis studied the subject three years ago, it found that over the previous 20 years stock ownership had gradually declined.

This condition does not affect the well-heeled, who thoroughly appreciate the power of compound interest and the merits of private enterprise. The damage instead has been inflicted on the rank-and-file. The wealthiest 10% of American households now control 89% of the retail stock market, as opposed to 77% in 2002. As equity returns have greatly outpaced wage growth, their investment gains have been the middle and lower classes' opportunity losses.

The corollary to skepticism is gambling. Those who believe in the U.S. economy will buy index funds (or other middle-of-the-road fare) and wait for good things to happen. That is an easy strategy to adopt, both in terms of investment selection and psychology. In contrast, those who constantly see disasters lurking around the corner are likely to speculate. For people with such beliefs, there's no point in being like everybody else. To succeed, they must beat the averages. Such a task will likely lead to frustration—perhaps even to quitting investing entirely.

Personal Responsibility

While it's easy to blame the media for misleading the public by overemphasizing investment winners while blaring economic warnings, it's important to realize that almost all financial news is *true*. Financial reporters might be guilty of giving the people what they want, but they generally aren't guilty of inventing facts. The news itself is real, but its interpretation may well mislead.

At any rate, complaining about the media won't alter the reality. Newsmakers live by clicks, and those clicks come to stories that discuss hot investments and cold economics. Successful shareholders, I suggest, will reverse that formula. They will avoid the allure of investment lottery tickets while celebrating positive economic news. As Warren Buffett can attest, the best way to make money is by being a realistic optimist rather than an unrealistic pessimist.

John Rekenthaler (john.rekenthaler@morningstar.com) has been researching the fund industry since 1988. He is now a columnist for Morningstar.com and a member of Morningstar's investment research department. John is quick to point out that while Morningstar typically agrees with the views of the Rekenthaler Report, his views are his own.

Follow-ups

NFT's are another so-called asset we have warned against. From The Guardian:

Man who paid $2.9m for NFT of Jack Dorsey's first tweet set to lose almost $2.9m

‘This is the Mona Lisa of the digital world’, says crypto entrepreneur Sina Estavi who bought the NFT in March 2021

14 Apr 2022

Crypto entrepreneur Sina Estavi made headlines in March 2021 when he paid $2.9m for an NFT of Twitter boss Jack Dorsey’s first tweet. But his efforts to resell it have run aground, with a top bid of just $6,800 as of Thursday.

The initial purchase was at the time among the most expensive sales of a non-fungible token, or NFT, and came amid a flurry of interest in the niche crypto assets.

Estavi put the tweet up for resale on the popular NFT marketplace OpenSea last week, initially asking for $48m.

That price tag was removed after offers in the first week were in the low hundreds of dollars. As of Thursday, the highest bid was 2.2 of the cryptocurrency ether – equivalent to about $6,800.

“My offer to sell was high and not everyone could afford it,” Estavi told Reuters via Twitter direct message, adding that he was no longer sure if he would sell the NFT.

“It’s important to me who wants to buy it, I will not sell this NFT to anyone because I do not think everyone deserves this NFT,” Estavi said.

NFTs are a form of crypto asset which can record the ownership of a digital file such as an image, video or text.

There is no guarantee of an NFT’s value and the market is rife with scams, fraud, counterfeits and market manipulation.

But Estavi was confident in the value of his purchase.

“This NFT is not just a tweet, this is the Mona Lisa of the digital world,” he said. ...

While announcing the NFT sale in a tweet on 6 April, Estavi pledged to give 50% of the proceeds – which he expected to be at least $25m – to charity. ...

From Morningstar:

Liquid Alternatives Funds Belong on Most Investors' Too-Hard Pile

Their diversification benefits have mostly been a mirage

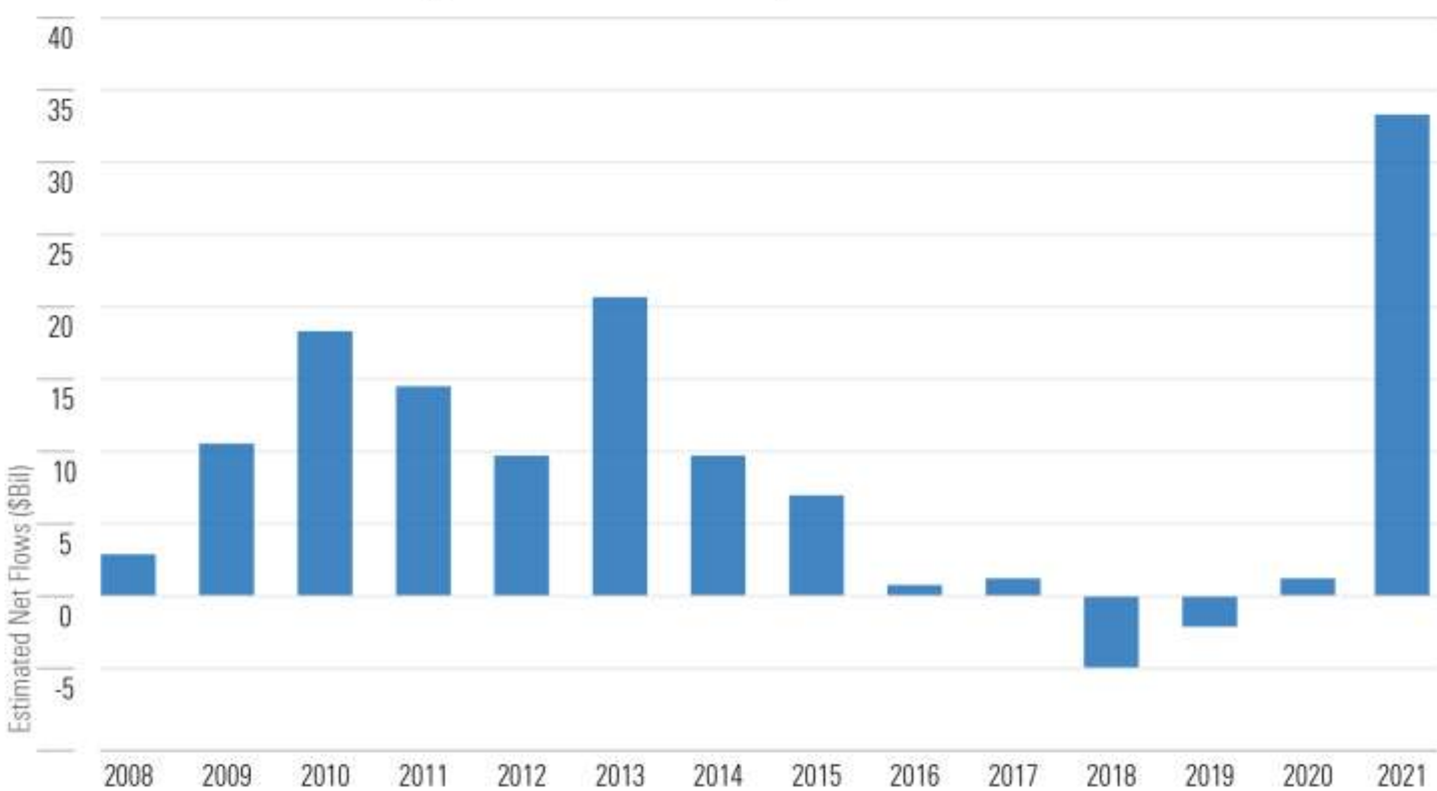
Ben Johnson, CFA
Apr 12, 2022

Markets ended 2021 on a high note. But not long after the ball dropped on New Year’s Eve, they fell out of bed. It has been a tough go thus far in 2022. The Morningstar Global Stock Market Index slumped 5.5% in the first quarter. Bond markets woke up with a hangover. After slipping 1.6% in 2021--its first calendar-year loss since 2013--the Morningstar U.S. Core Bond Index was down another 6% through the first three months of 2022.

Rocky markets, still-lofty valuations, and low interest rates have sent investors in search of alternatives to the asset-class staples of any well-diversified portfolio: stocks, bonds, and cash. In 2021, investors allocated more to liquid alternatives funds in any year since 2013, pouring $33.4 billion into the category.

But what are liquid alternatives funds? Are they a good complement to traditional asset classes? And what are the odds that investors can succeed with these strategies? In this article, I'll dig into each of these questions in turn.

Exhibit 1 Investors Are Showing Renewed Interest in Liquid Alternatives



Source: Morningstar Direct.

What's an Alternative?

Liquid alternatives funds trace their roots back to the global financial crisis. Many of the strategies these funds employ had previously been the exclusive domain of the well-heeled and were offered in hedge funds. Many of these funds used a heaping helping of leverage and locked up investors' money, and some were hedge funds in name only. (They didn't actually hedge anything!) Offering similar strategies in mutual funds ticked two important boxes in asset managers' product development playbook. First, it offered the opportunity to "democratize" access to investment strategies that had previously been available only to a select few. Second, it was a way to fight the last war (a core competency of the industry). When the first liquid alternatives funds arrived on the scene, investors were still coping with the shock of the financial crisis and the impact it had on their portfolios. "Never again will I stand by and watch my portfolio sink as markets tumble and the correlations between stocks and bonds converge!," said many. Liquid alternatives funds aimed to assure investors they'd not relive this experience.

Liquid alternatives encompass a broad array of investment strategies from arbitrage to trend-following. If there's a common thread among them, it's that they're trying to rearrange different types of investment risk to deliver a pattern of returns different from what you'd get from meat-and-potatoes asset classes. Ideally, the end result of investing in them would be a meaningful improvement in your portfolio's risk-adjusted returns.

Some liquid alternatives strategies represent a modification to long-only stock or bond exposure, like long-short equity and nontraditional bond funds. Others look to diversify stock and bond risk, like equity market-neutral funds. There are also liquid alternatives strategies that are strictly opportunistic, such as trend-following. Exhibit 2 provides a taxonomy of the different objectives of the panoply of liquid alternatives strategies.

Exhibit 2 A Taxonomy of Alternative Strategies

Traditional	**Alternatives**	
Modifiers	Diversifiers	Opportunistic
Long-Short Equity	Equity Market Neutral	Macro Trading
Derivative Income	Event Driven	Systematic Trend
Nontraditional/Flexible Bonds	Options Trading	
Tactical/Flexible Allocation	Relative Value Arbitrage	

Source: Morningstar

Are They a Good Complement?

A good litmus test for liquid alternatives funds is whether an investment in them improves the risk-adjusted returns of a diversified portfolio. In an August 2018 analysis, my Morningstar colleagues Jason Kephart and Maciej Kowara put these funds to the test.[1] Their analysis used a simple 60% stock/40% bond index portfolio as their benchmark. Each alternative fund included in the analysis received an allocation that maximized the portfolio's risk-adjusted returns, as measured by Sharpe ratio. Over the five years through 2017, they found that the majority of alternatives funds that lived from the beginning of the period to its end failed to improve the Sharpe ratio of the simple 60/40 index portfolio. Just eight of the 134 funds (6% of them) improved the 60/40 portfolio's Sharpe ratio by more than 10%. If funds that were merged or closed during this five-year stretch were included, the results would have been even worse.

But 2013–17 was a great stretch for stocks and a mostly good one for bonds, and it was marked by rising correlations between the two. What if we look at a different period? In a follow-up to their original work, Kephart and Kowara replicated their analysis for the period spanning from the pre-financial crisis peak in October 2007 through March 2012. [2] Their sample was much smaller (remember, these funds' popularity peaked only after the markets cratered), including just 65 funds. Of those 65, 45 survived, and 17 (26% of the original 65) improved the 60/40 portfolio's Sharpe ratio by more than 10%.

The data doesn't paint a pretty picture. Most liquid alternatives funds haven't proved they have what it takes to improve investors' portfolios. But that's not to say that none of them can. It's just that investors hoping to succeed with these funds face a Herculean effort.

The 10 Labors of Liquid Alternatives Fund Investors

Morningstar's 2021 Global Liquid Alternatives Landscape outlines 10 key challenges facing liquid alternatives investors in their quest for better risk-adjusted returns.[3]

1) Lineup Churn. Liquid alternatives funds have tended to live fast and die young. Among the 797 funds that have ever belonged to the broad alternative Morningstar Category group, 450 (56%) have been liquidated or merged away. The median age of these funds at the time they expired was four years. As of June 2021, less than 10% of liquid alternatives funds had lived through the 2008 global financial crisis.

2) Liquidity. Some liquid alternatives funds dabble in less-liquid fare. This can create a liquidity mismatch in funds that are meant to provide their investors with liquidity on a daily basis. When too many investors come calling for their assets and managers have to raise cash in a pinch, the pressure applied to the prices of less-liquid holdings can punish fundholders.

3) Complexity. Some of these strategies can come across as gibberish, even to astute investors. Complexity is rarely a positive trait in most investment settings; the less investors understand what they own, the less likely they are to succeed.

4) Leverage. The use of leverage is common among liquid alternatives funds. While leverage can give investors a boost on the upside, it more commonly makes headlines for its devastating impact on the downside.

5) Constraints. Liquid alternatives funds face far more constraints than similar strategies plied in hedge funds. These constraints can apply to the use of liquid alternatives leverage, liquidity, levels of portfolio concentration, and more. While it isn't clear whether this is beneficial or detrimental, on average, it is all but certain that investors in these funds are getting something very different from what's on offer in hedge funds.

6) Instability. There are real live people managing these portfolios, and personnel turnover has been a fixture of liquid alternatives funds. This sort of disruption is rarely (if ever) beneficial for fund investors.

7) Fees. The less investors pay, the more they get. In the case of liquid alternatives funds, they generally pay more--a lot more. In 2020, the asset-weighted average fee across all actively managed alternative funds was 1.20%, nearly double the 0.62% asset-weighted average fee for all actively managed funds.

8) Style. The winds have not been blowing in many liquid alternatives funds' favor. Value stocks have struggled, so funds that try to harness the value premium have languished. High correlations among asset classes have made it tough sledding for trend-following strategies, and many of them couldn't act quickly enough to capitalize on the early-2020 market meltdown and subsequent melt-up. If a liquid alternatives fund hasn't got wind in its sails, it may leave investors with a case of cabin fever.

9) Investor Gap. Investors have generally had little success with liquid alternatives funds. This is evidenced by the gap between these funds' time and dollar-weighted returns. The former measures the returns the funds produce, the latter measures the returns investors earn--accounting for the timing of their purchases and sales. Exhibit 3 shows that over the 10 years through Dec. 31, 2020, investors in liquid alternatives funds have made particularly poor timing decisions with these funds, often buying after stretches of stellar performance and bailing near the bottom.

10) "Diworsification." Most liquid alternatives funds haven't been good diversifiers. In many cases, they've not only failed to improve the risk-adjusted returns of a diversified portfolio, they've made them worse. Granted, the market environment hasn't been conducive to the success of many of these strategies, but many investors

have missed out on the chance for better risk-adjusted returns elsewhere as they bide their time waiting for the tide to turn.

Alternate Ending

I personally think liquid alternatives belong on most investors' "too hard" pile. (We agree.) While there are a handful of standouts among their ranks (two of which, as shown below, we are currently using to reduce risk for clients), I think it will be difficult for many to invest an amount that could yield the desired diversification benefits and to stick with these strategies long enough to reap those rewards.

[1] Kephart, J., & Kowara, M. 2018. "Liquid Alternatives Have Yet to Prove They Belong in Portfolios." https://www.morningstar.com/articles/878584/liquid-alternatives-have-yet-to-prove-they-belong-in-portfolios

[2] Kephart, J., & Kowara, M. 2018. "What If? The Liquid Alternatives Edition." https://www.morningstar.com/articles/883541/what-if-the-liquid-alternativesedition

[3] Alitovski, E., Mottola, M., Paganelli, F., & Scott, S. 2021. "2021 Global Liquid Alternatives Landscape." ...

Exhibit 3 Investors Have Had Little Success With Liquid Alternatives

U.S. Category Group	Investor Return (%)	Total Return (%)	Gap (%)
Allocation	7.35	8.04	-0.69
Alternative	-0.25	4.08	-4.33
International Equity	5.05	6.44	-1.39
Municipal Bond	2.96	4.21	-1.25
Sector Equity	7.38	11.33	-3.95
Taxable Bond	2.99	4.11	-1.12
U.S. Equity	12.03	13.20	-1.17
Overall	**7.72**	**9.40**	**-1.68**

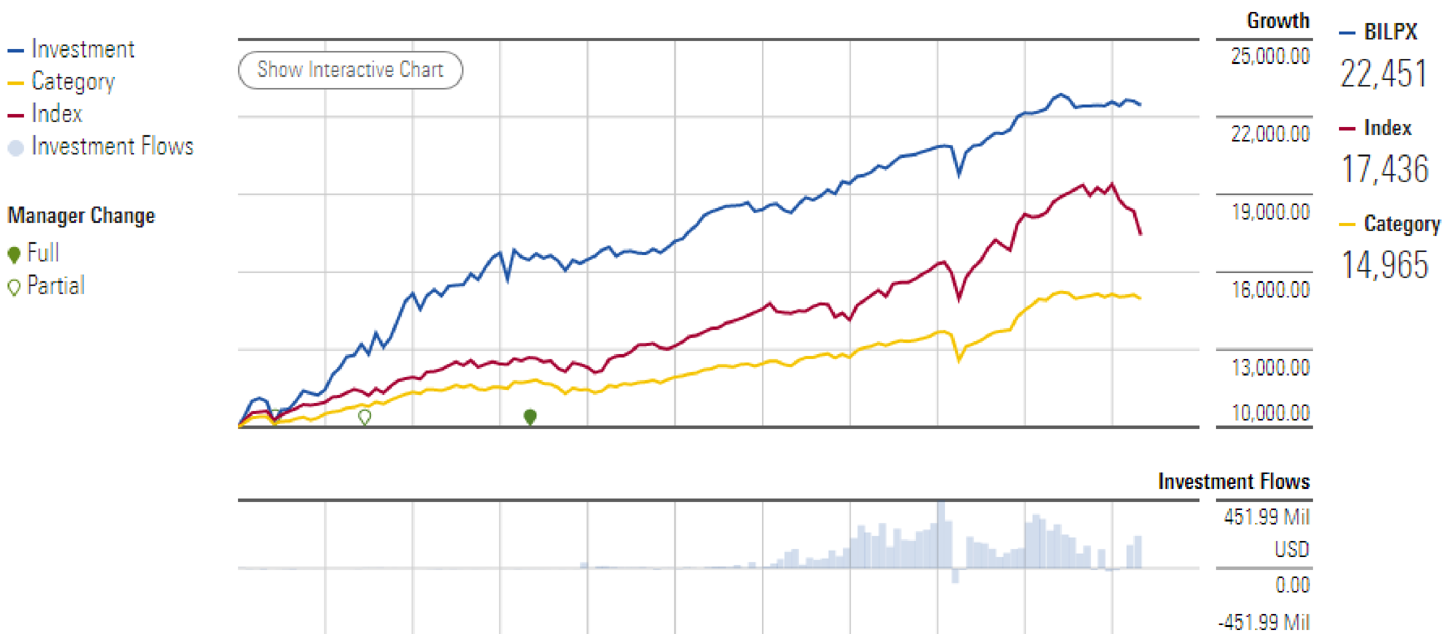
Source: Morningstar Direct. Data as of Dec. 31, 2020.

Of the 3 HCM clients having secondary objectives of Capital Preservation, two hold positions in BILPX, and the other in BIMBX:

BlackRock Event Driven Equity Instl BILPX ★★★★★ Bronze

NAV / 1-Day Return	Total Assets	Adj. Expense Ratio	Expense Ratio	Fee Level	Longest Manager Tenure
9.86 / ↓0.30 %	8.9 Bil	1.320%	1.320%	Below Average	6.99 years

Category	Alt Style Correlation / Relative Volatility	Min. Initial Investment	Status	TTM Yield	Turnover
Event Driven	High / Low	2,000,000	Open	0.45%	64%



Total Return %	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD
Investment	14.63	32.30	10.40	-1.56	4.29	7.14	5.49	7.29	6.30	1.94	-0.60
Category	5.36	7.65	1.57	-0.75	4.11	4.30	1.61	7.68	6.69	4.14	-1.17
Index	9.66	8.83	4.30	-1.03	6.66	10.86	-2.86	15.25	11.86	6.36	-10.13

Plenty of resources propel this strategy.

Summary | by Bobby Blue Mar 15, 2022

A sizable and experienced team executing a proven approach is enough to overcome capacity concerns on BlackRock Event Driven Equity, which supports a Morningstar Analyst Rating of Bronze for its cheapest share class. ...

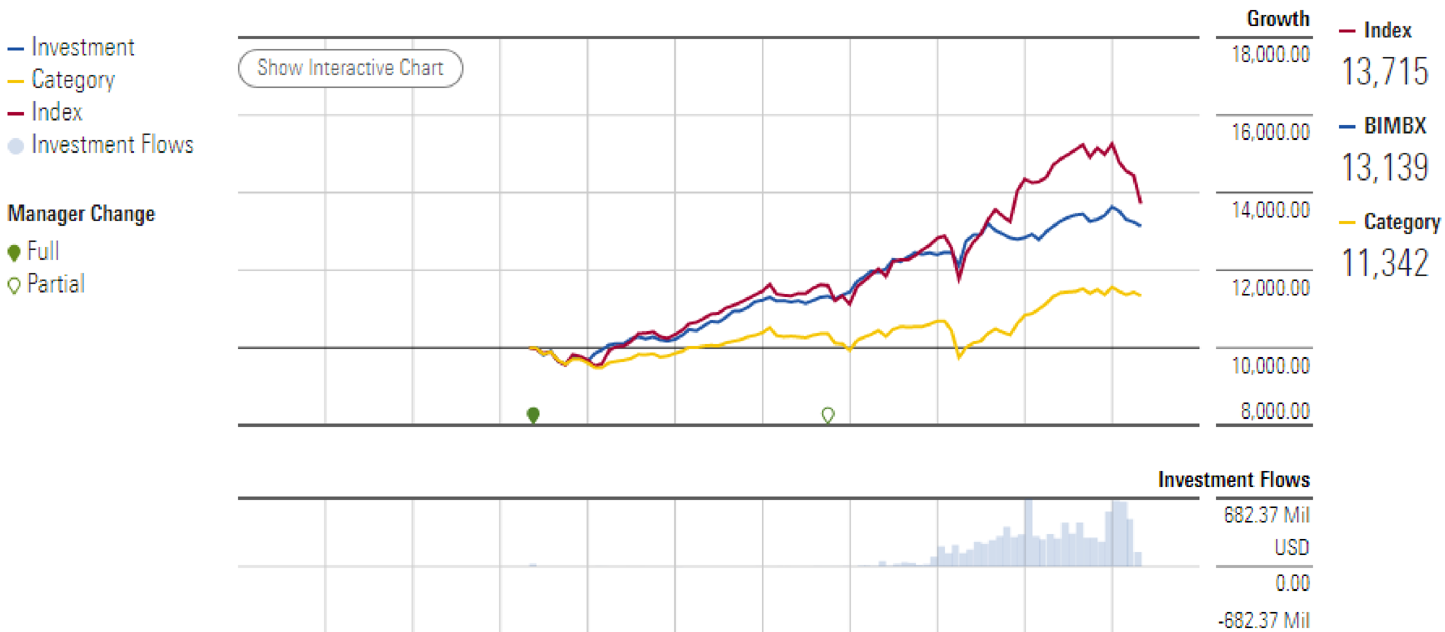
Lead manager Mark McKenna ... brings more than 15 years of event-driven management expertise to bear on this strategy, after leading the event-driven efforts at Caxton and then Harvard. The team leverages resources from the broader organization, including a risk and analytics group that built out a custom risk platform for the team.

The team's approach allows them to invest in corporate actions of all types, in contrast to more straightforward merger arbitrage strategies. It will stretch into soft catalyst events like management changes as well as invest in distressed credit opportunities, in addition to the hard catalyst merger arbitrage trades. While the team has some experience in soft catalyst trades, their lower probability of success introduces additional risk factors which the team attempts to hedge away. Though it started out with roughly 90% of the portfolio dedicated to merger-arbitrage deals and just 10% to soft catalyst events, that split has come down to approximately 70/30 since 2020. That's helped the team navigate a difficult stretch for merger arbitrage, with soft catalyst and credit positions driving the majority of the fund's performance for the first time in 2020 and again in 2021. Its long-term track record stands tall, its 4.8% annualized return since May 2015 through February 2022 topping all but two Morningstar Category peers.

Despite that, the team's move away from more defined hard catalyst events like merger arbitrage bears monitoring. The strategy has swollen in size to over $14.5 billion across the mutual fund and UCITS, which is more than triple the size of the next-largest category peer. If the team were unable to rotate into merger-arbitrage deals in a more favorable environment for those trades, it could be a sign that it's grown too large. ...

BlackRock Systematic Multi-Strat Instl BIMBX ★★★★ Bronze

NAV / 1-Day Return	Total Assets	Adj. Expense Ratio	Expense Ratio	Fee Level	Longest Manager Tenure
10.07 / ↓0.30 %	9.5 Bil	0.970%	0.970%	Low	6.95 years
Category	**Alt Style Correlation / Relative Volatility**	**Min. Initial Investment**	**Status**	**TTM Yield**	**Turnover**
Multistrategy	High / Low	2,000,000	Open	1.77%	936%



Total Return %	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD
Investment	—	—	—	—	5.90	9.89	1.84	8.43	3.57	6.18	-3.64
Category	4.92	6.96	3.35	-1.71	2.51	5.56	-4.31	7.77	1.63	6.86	-1.67
Index	9.66	8.83	4.30	-1.03	6.66	10.86	-2.86	15.25	11.86	6.36	-10.13

A well-balanced multistrategy that aims to provide downside protection.

Summary | by Bobby Blue Jul 15, 2021

A well-structured, experienced team oversees BlackRock Systematic Multi-Strategy, designing a resilient portfolio that has excelled in varied market environments. ...

Lead manager Tom Parker leans on more than 40 years' worth of industry experience, with the last decade spent managing BlackRock's largest hedge fund, Fixed Income Global Alpha (FIGA). It shares many elements with this offering, with the strong long-term record being generated by the same 63-person investment team. Recent churn, including the loss of the group's head of macro investing in both 2018 and 2020, introduces some uncertainty, but the strategy remains in proven and experienced hands.

The core of this strategy is a long-only, multisector fixed-income sleeve, with an allocation of roughly 50% of the strategy's risk budget. This systematic strategy aims to provide credit exposure with less downside risk than pure high yield. It has been successful at that objective owing to cautious credit selection; its worst monthly loss of 5.3% is nearly half the Bloomberg Barclays US High Yield Index's worst loss of 11.5% over the fund's lifetime. Complementing that sleeve are two offsetting sleeves; a market-neutral equity component that skews toward companies with solid balance sheets that should perform well in credit sell-offs, and a global macro strategy that seeks to benefit from periods of interest-rate volatility. Each of these sleeves use strategies that are adopted from FIGA but with a lower use of leverage. This has led to lower portfolio volatility but has also damped returns from those strategies, particularly in the macro sleeve.

The team constructed these strategies to perform well during credit sell-offs (when the fixed-income sleeve will lag), which leads to a well-balanced return stream across different market environments. Its 4.9% annualized return from its June 2015 inception through June 2021 is in the top decile of category peers, and its 0.97 Sharpe ratio is best in the category. ...

Positions

LCII - We purchased 2% positions in this RV Components IVA System Pick for 6 clients @ 105.27 on 4/5:

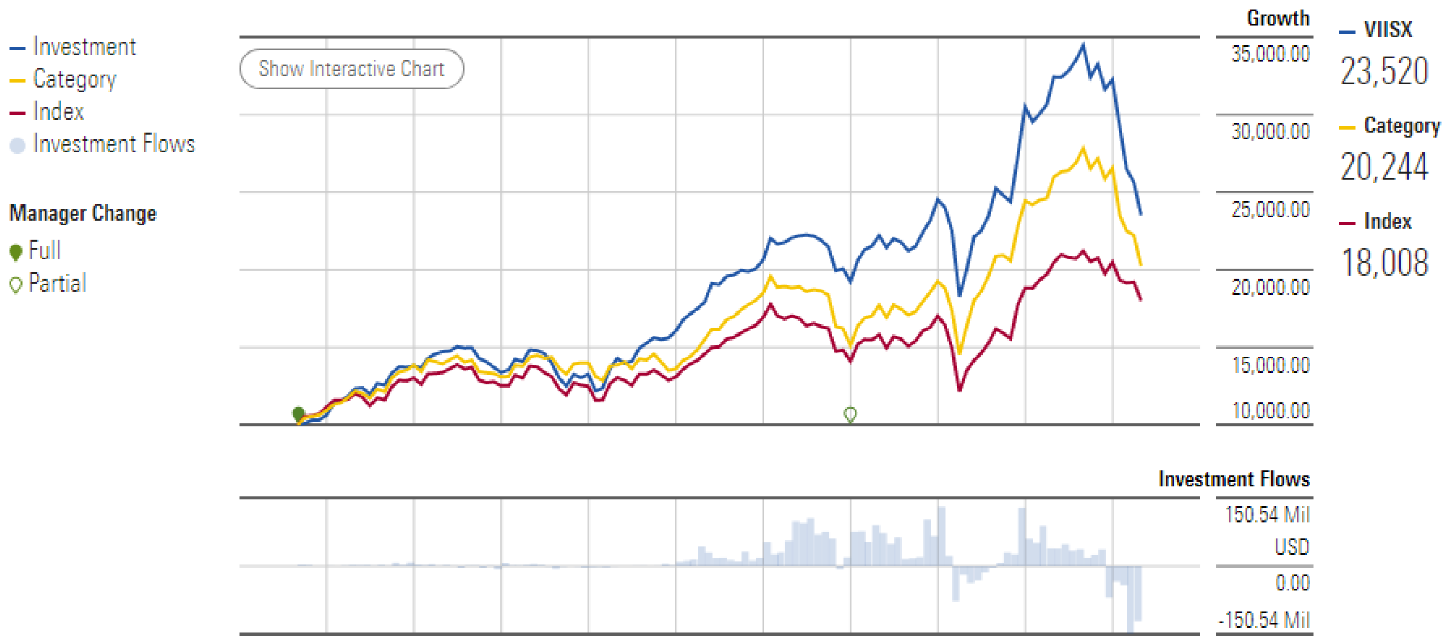
Insider Buying:

Trade Date	No. Part	Participants	Net Sell (Shares)	Net Buy (Shares)
03/31/2022	3	Gero James, Lippert Jason,...		22,515
03/08/2022	1	O'Sullivan Kieran		5,000

VIISX - We sold this OEF for 1 client @ 17.69 on 4/20, and the other 3 clients holding it @ 17.53 on 4/21:

Virtus KAR International Small-Mid Cap I VIISX ★★ Neutral

NAV / 1-Day Return	Total Assets	Adj. Expense Ratio	Expense Ratio	Fee Level	Longest Manager Tenure
16.75 / ↑ 1.09 %	1.9 Bil	1.140%	1.140%	Above Average	9.65 years
Category	**Investment Style**	**Min. Initial Investment**	**Status**	**TTM Yield**	**Turnover**
Foreign Small/Mid Growth	Mid Growth	100,000	Open	2.96%	23%



Total Return %	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD
Investment	—	29.89	-3.06	-0.87	21.03	28.48	-6.79	27.58	24.37	5.73	-27.09
Category	22.20	26.61	-5.40	7.05	-2.98	36.19	-18.34	27.78	28.40	8.79	-23.53
Index	18.81	16.82	-3.70	-0.40	4.84	29.28	-16.70	20.79	10.54	8.88	-12.13

A key mandate change leads to a downgrade.

Summary | by Adam Sabban Aug 20, 2021

Virtus KAR International Small-Cap's expansion into mid-caps creates enough uncertainty to warrant a downgrade of the strategy's Morningstar Analyst Rating to Neutral from Bronze for three share classes, while the pricier C shares remain Neutral.

A shift in this fund's investment mandate alleviates one risk but creates others. Effective Sept. 24, 2021, the fund will begin buying mid-cap stocks in addition to small caps, signified by a name change to Virtus KAR International Small-Mid Cap. The inclusion of larger companies with more-liquid stocks gives the strategy more room to invest its asset base, which ballooned to more than $3 billion as of July 31 from about $50 million in 2016. Virtus previously indicated it was likely to close the fund at around $3 billion in assets but now believes the strategy has twice the capacity.

However, this fund specialized in finding liquidity in underfollowed, high-quality small-cap stocks with scant trading volumes, a task less relevant in the mid-cap universe, which can support more institutional investors and has greater analyst coverage in the marketplace. Over the strategy's history, manager Craig Thrasher has regularly purchased stocks well below the market cap of the average small-cap stock in the MSCI All Country World Index ex USA Small-Cap prospectus benchmark. Thrasher will soon have his eyes on companies valued at up to $10 billion, a big step up from the fund's current average market cap of $3.6 billion but still well below the largest companies in the fund's new benchmark, the MSCI ACWI ex USA Small Mid Cap. He knows his team's edge is stronger in lesser known stocks. ...

Thrasher and team have done very well on this small-cap fund but have minimal experience investing in mid-cap stocks. It may be harder for them to repeat their previous success. ...

While VIISX hasn't performed significantly worse than its Category peers that we continue to hold for clients (5* GPIIX, 4* OBIOX, 5* WCMSX) since its Morningstar Analyst downgrade, we had already stopped allocating new funds. We prefer funds like GPIIX that close before they grow too large. Morningstar's chart also shows 5* ISCF, iShares MSCI Intl Small-Cap Mltfct ETF, which, due to Value being one of its Factors, we typically pair with one of the Small-Cap Growth OEFs for clients.

In theory, provided each funds' quantitative approach is valid, you should end up with similar returns over the long term: