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5 Things We Learned About Investing in 2022 Morningstar indexes reveal lessons about the unpredictability of markets amid a painful for year for both stocks and bonds.

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There's no shortage of received wisdom in the world of investing. Any trader or broker could reel off at least 20 old saws like "Don't fight the Fed," or "Buy the rumor, sell the news." Rules of thumb explain what moves markets, how assets interact, and which investments best suit the macro environment.

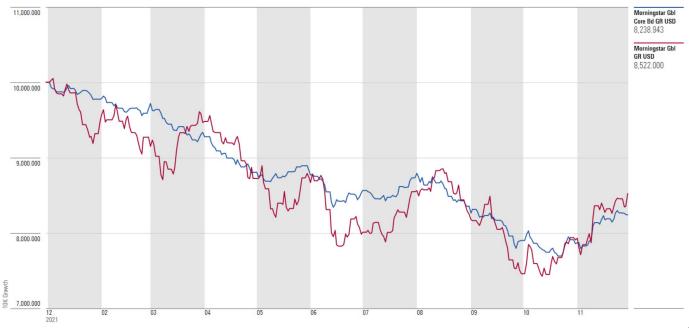
Much of this wisdom is flawed. The forces that drive financial market behavior are unpredictable, and relationships between assets are fluid. Investment claims are often made by those who have something to sell. What can sound axiomatic often violates actual truisms like "past performance is no guarantee of future results," "the plural of anecdote is not data," and "the best company can be a bad investment at the wrong price."

Markets have been vexing in 2022. Generationally high inflation, a belated but aggressive monetary policy response, and the bloodiest European conflict since World War II have wreaked havoc on stocks, bonds, and other assets. For investors, the year has delivered many painful lessons. Here we propose five learnings from 2022:

- 1) Diversification isn't always a free lunch (or bonds aren't always ballast).
- 2) Rising interest rates don't have a predictable impact on stocks.
- 3) Sustainable investments aren't immune to market cycles.
- 4) Growth themes don't always grow.
- 5) Private markets don't only go up.

Lesson 1: Sometimes Diversification Makes You Pay for Lunch, and Bonds Aren't Always Ballast Diversification has long been referred to as "the only free lunch in investing," in response to the old saying that "there's no such thing as a free lunch." But classic stock/bond diversification simply has not worked in 2022. Stubbornly high inflation in most major markets, a string of steep interest-rate hikes by central banks, recessionary worries, and conflict in Europe have taken a heavy toll on both major asset classes. The Morningstar US Moderate Target Allocation Index, which represents the traditional mix of 60% stocks and 40% bonds, declined nearly 13% through the first 11 months of 2022. Morningstar's range of multi-asset indexes for investors in Australia, Canada, the eurozone, Japan, New Zealand, and the United Kingdom have all suffered losses this year thanks to the synchronized swan dive for both equities and fixed income, as represented by the Morningstar Global Markets and the Morningstar Global Core Bond indexes in Exhibit 1 below.

Exhibit 1 Stocks and Bonds Have Fallen in Lockstep in 2022



Source: Morningstar Direct. Year-to-date data as of Nov. 30, 2022.

"Ballast" is a popular metaphor for bonds. Fixed income is supposed to be a boring but stable asset class, capable of keeping a portfolio ship steady even in the stormiest waters. This is exactly the role fixed income played in the three most recent bear markets for equities prior to 2022 — at the onset of the coronavirus pandemic in the first quarter of 2020, the global financial crisis of 2007-09, and in 2000-02 after the popping of the dot-com bubble, when the crash of technology, media, and telecom stocks was followed by recession and 9/11. In each period, the Morningstar Global Core Bond Index was in positive territory when the Morningstar Global Markets Index suffered heavy losses. Exhibit 2 below is the kind of performance chart we are accustomed to seeing during equity market selloffs.

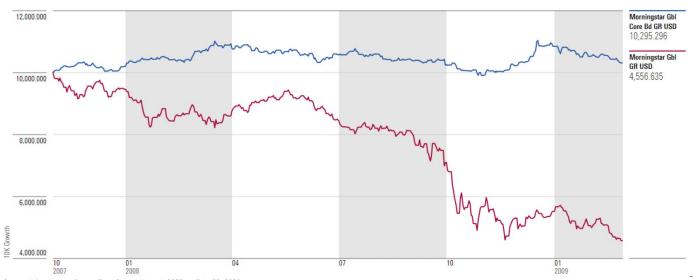


Exhibit 2 In the Global Financial Crisis of 2007-09, High-Quality Bonds Acted as a Safe-Haven Asset While Stocks Were Plummeting

Source: Morningstar Direct. Time Period: Nov. 1, 2007, to Feb. 28, 2009.

"The Worst Bond Market Ever," as Morningstar's John Rekenthaler has labeled the 2022 fixed-income meltdown ¹ looks obvious in retrospect. Thanks to rock-bottom interest rates in response to the pandemic, bond yields were at historic lows in many markets. Then came inflation and rate hikes. Yields soared and prices sank. It should be noted that low bond yields in the aftermath of the global financial crisis did not presage disaster for fixed income, despite many warnings of "bond bubbles" and commentators writing off bonds as "return-free risks." Raging inflation foreseen by the doomsayers of the 2010s didn't materialize. Perhaps the cries of wolf from those years begat recent complacency?

What about other forms of diversification in 2022? Gold, a millennia-old store of value, did not serve that function. Neither did cryptocurrency, a more modern inflation hedge. Some alternative strategies, such as trend-following, have finally done well after many years of languishing.

Within the traditional stock and bond space, energy-related equity investments have been a real bright spot this year. As seen in Exhibit 3 below, Morningstar indexes representing upstream, midstream, and downstream nodes of the energy value chain all saw heady gains in 2022, even as stocks and bonds languished.

¹ Rekenthaler, J. "The Worst Bond Market Ever," Morningstar. Nov. 21, 2022.

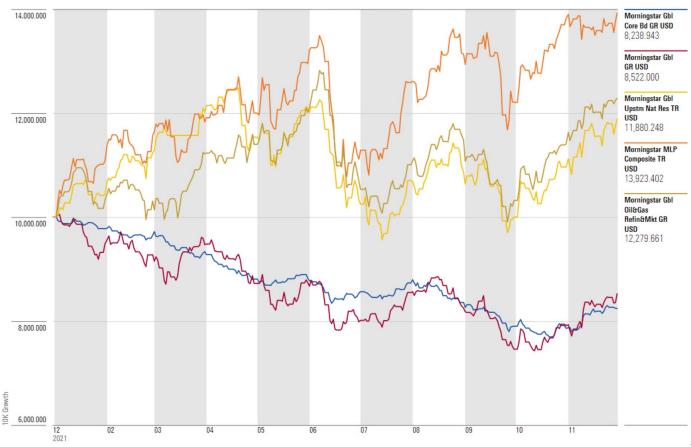


Exhibit 3 Energy-Related Investments — One of 2022's Few Bright Spots

Source: Morningstar Direct. Year-to-date data as of Nov. 30, 2022

Energy investments have staged a remarkable comeback from April 2020, when pandemic-depressed demand sent oil futures into negative territory. The price of oil soared past \$120 per barrel after the Russian invasion of Ukraine. Even as the oil price has moderated, energy-related equities have paced the market in 2022. Pipeline companies (the midstream segment) have been the best performers within the energy sector. Structured as master limited partnerships, they have been a refuge for income investors.

The trouble is that many investors had given up on their commodities-related investments after years of poor returns and have little exposure to energy-related equities. The energy sector shrunk from 11.0% of the Morningstar Global Markets Index in 2011 to just 3.5% at the end of 2021.²

Where do investors go from here? The good news is that bond yields have risen in most major markets. The Morningstar Global Core Bond Index, for example, has seen its yield rise from 1.05% at the start of 2022 to nearly 3.3% in November. Niche areas within fixed income offer juicier yields. The Morningstar US LSTA Leveraged Loan Index, for example, carried a 9.5% yield as of late 2022, while the Morningstar European Leveraged Loan Index yielded 8.3%.

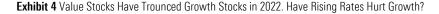
² Lefkovitz, D. "Will U.S. Equities Stay on Top and Bond Yields Rise?" Morningstar Indexes. Jan. 13, 2022.

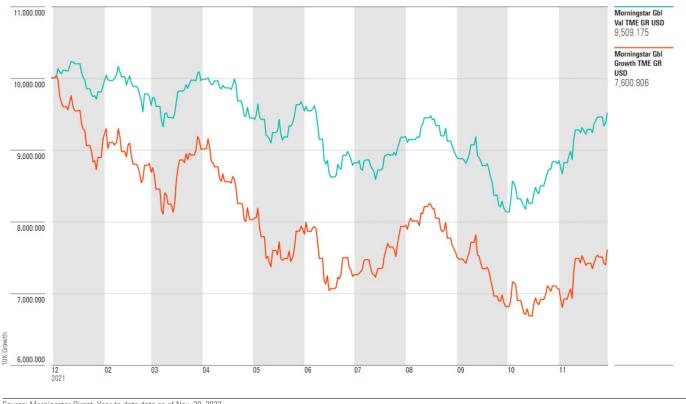
"Fixed income is looking more appealing than it has been in some time," says Marta Norton of Morningstar Investment Management.³ Morningstar portfolio strategist Amy Arnott makes a strong long-term case for fixed income in "Why Bonds Should Still Play a Role in Your Portfolio." ⁴ During many years of low interest rates and depressed bond yields, market watchers talked of "TINA"—There Is No Alternative to equities. Fixed income increasingly offers an alternative, which may not be great news for equities, but certainly gives debtholders and income investors much to celebrate.

Giving up on bonds does seem premature. Market behavior in 2022 has been unusual, but bonds may well return to their diversifying ways. If anything, we've learned that correlations can bounce around.

Lesson 2: Rising Rates Don't Have a Predictable Impact on Stocks

The performance divergence between growth and value stocks in 2022 has been staggering. Consider Morningstar's global value and growth indexes for the first 11 months of the year. The Morningstar Global Value Target Market Exposure Index, a broad gauge of equities with value characteristics, outperformed its growth counterpart by nearly 20 percentage points for the year through the end of November, as seen in Exhibit 4 below.





Source: Morningstar Direct. Year-to-date data as of Nov. 30, 2022.

3 Solberg, L. "Are Bonds a Better Bet Than Stocks Right Now?" Morningstar. Nov. 9, 2022. 4 Arnott, A. "Why Bonds Should Still Play a Role in Your Portfolio." Morningstar. Oct. 17, 2022. Rising interest rates are commonly blamed for growth stocks' travails. Higher rates, the explanation goes, are worse for growth stocks because of their longer durations. It sounds logical. But research from AQR disputes the link between style performance and interest rates. Writes AQR's CIO Cliff Asness:

"Growth stocks have much longer-dated cash flows that value stocks and thus should be a 'longer duration asset' and move more with longer-term interest rates, right? This is taken as an axiomatic given in countless pundit and press observations. However, it's not nearly that simple, and mostly it's just not true." ⁵

Consider style performance in prior periods of rising rates. The Federal Reserve hiked rates by 2.25 percentage points from 2015 to 2018, but growth stocks thrived. It was the FANG market, led by Facebook (now Meta Platforms META), Amazon.com AMZN, Netflix NFLX, and Google (now Alphabet GOOG). Morningstar's global growth and global value indexes were both up big in those years. Then there was 1999, a year in which the Fed raised interest rates three times, but the dot-com bubble propelled growth stocks into the stratosphere.

In 2022, dividend-paying stocks have shined. That's notable because a common line of thinking sees rising rates as bad for dividends. Why? Higher bond yields supposedly diminish the appeal of equities for income investors and raise their debt-servicing costs. Yet, the Morningstar Global Dividend Yield Focus Index has shrugged off rate hikes to outperform in 2022, as seen in Exhibit 5.

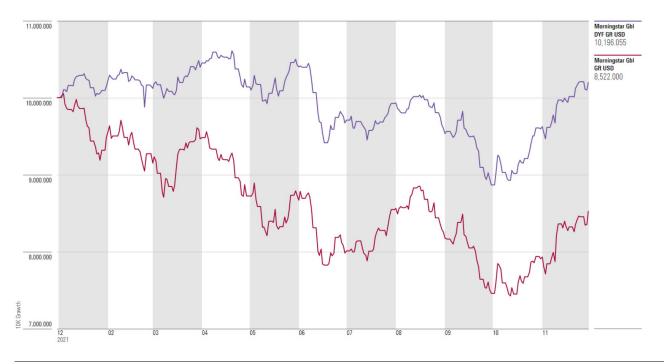


Exhibit 5 Dividend-Paying Equities Have Dramatically Outperformed in 2022, Despite Rising Interest Rates

Source: Morningstar Direct. Year-to-date data as of Nov. 30, 2022

⁵ Asness, C. "Is Value Just an Interest Rate Bet? Spoiler Alert: Not Even Close." Aug. 11, 2022.

Why have dividend payers held up well this year? Several factors are at play. It's certainly true that rising rates have led to higher yields on cash and bonds. But, as discussed above, fixed income has been a disaster from a total-return perspective. Sector dynamics have also boosted the dividend-paying section of the market. Energy, a dividend-rich area, is by far the best-performing equity sector. Dividend payers in defensive sectors like healthcare, consumer staples, and utilities have weathered the storm far better than the dividend-light technology sector, which has led the market down in 2022.

Historically and globally, the link between dividend payers and rates is weak. To cite one example, in 2004-06, rates rose but dividend stocks dramatically outperformed the market. In "Why Haven't Rising Rates Sunk Dividend-Paying Stocks?" we examined the performance of high-yield equities in the U.S., U.K., Germany, Japan, and Australia and found no clear relationship between rates and dividends.⁶

The lesson for investors? Don't try to time the macro environment. Growth stocks, especially technology, entered 2022 carrying sky-high valuations, after years of market leadership. Energy and other dividendrich areas on the value side of the market looked more attractive. For dividend investors, fundamental factors like quality and financial health are far more important than interest rates.

Lesson 3: Sustainable Investments Aren't Immune to Market Cycles

Consider the struggles of the Morningstar Global Sustainability Leaders Index in 2022 in Exhibit 6.

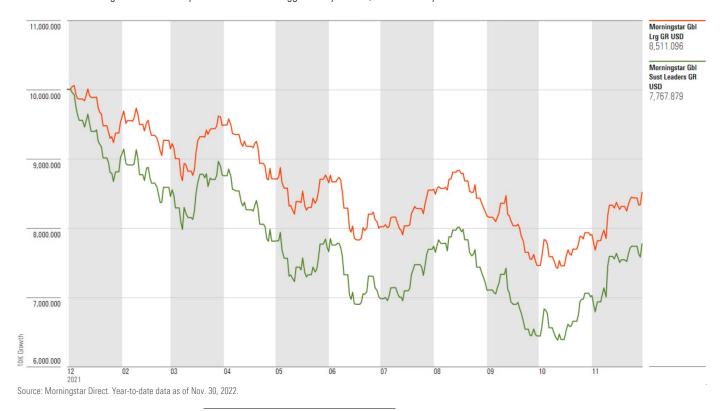


Exhibit 6 The Morningstar Sustainability Leaders Index Has Lagged Badly in 2022, as Have Many Sustainable Investments

⁶ Lefkovitz, D. and Gattani, S, "Why Haven't Rising Rates Sunk Dividend-Paying Stocks?" Morningstar Indexes. Oct. 27, 2022.

The Morningstar Global Sustainability Leaders Index, which excludes several classes of stock and selects companies with the lowest environmental, social, and governance-related risks, according to Morningstar Sustainalytics, had outperformed its parent index by 28 percentage points in cumulative terms for the five years ended in 2021. It wasn't alone. For the five years through 2021, 80% of Morningstar sustainable indexes with five-year histories outperformed their conventional equivalents.⁷ Some argued that strong ESG practices contributed to outperformance.

So, what's going on in 2022? A growth bias has hurt sustainable equity funds this year, according to an analysis by Morningstar's Jon Hale.⁸ Many growth companies handle ESG risks well. But in late 2021, Morningstar research concluded: "We've found that investors are paying too much for good ESG companies." ⁹ Too little energy exposure and too much technology has hurt the Sustainability Leaders index in 2022, just as the opposite was true in previous years.

What happens when the growth bias is removed from a sustainable portfolio? The Morningstar Global Sustainability Large-Mid Value Index outperformed the market in 2022, as seen in Exhibit 7.

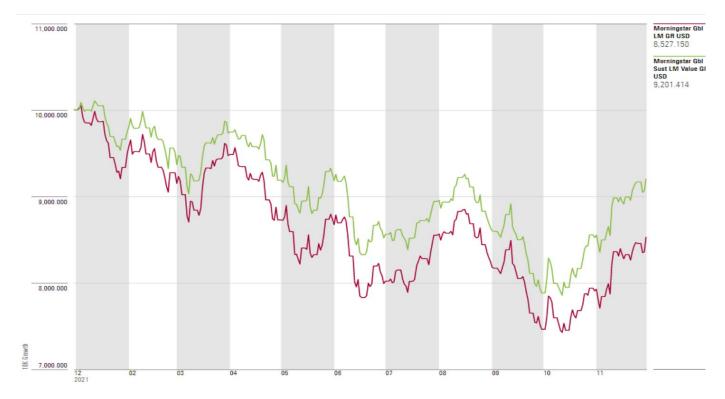


Exhibit 7 Value-Oriented Sustainable Investments Have Beaten the Market in 2022, Demonstrating the Impact of Removing Style Bias From Sustainability

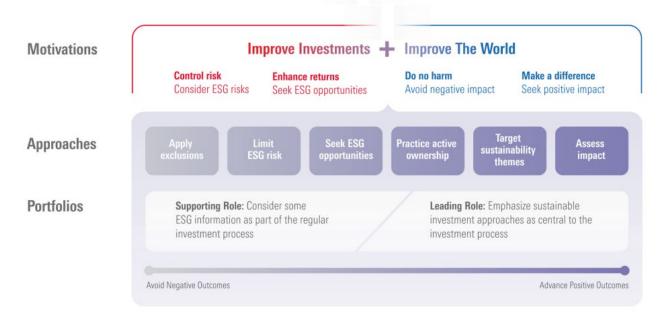
Source: Morningstar Direct. Year-to-date data as of Nov. 30, 2022.

⁷ Lefkovitz, D, "Morningstar Risk/Return Analysis Reveals Mixed Results for 2021." Feb. 3, 2022. 8 Hale, J. "Growth Bias Has Hurt Sustainable Equity Funds This Year." Morningstar.com. Sept. 29, 2022. 9 Kelly, H. "What's the Cost of Buying Good ESG Companies?" Nov. 23, 2021.

The sustainability value index includes the shares of companies with value characteristics that also carry low levels of ESG risk. Similarly, the Morningstar Global Markets Sustainability Dividend Yield Focus Index has outperformed by a wide margin. As discussed above, dividends have been a bright spot in 2022.

The value and dividend-screened sustainability indexes reveal another important point about sustainable investments. They're not a monolith. Sustainable investments vary in their motivations and applications. The Morningstar Sustainable Investing Framework displayed in Exhibit 8 below illustrates a broad spectrum of approaches. Each has its own goals. Each has its own profile.

Exhibit 8 The Morningstar Sustainable Investing Framework



Source: Morningstar.

The sustainability leaders index is primarily geared toward limiting ESG risk (though it also applies exclusions, which demonstrates that sustainable investing approaches are not mutually exclusive). The Morningstar Global Markets Renewable Energy Index, which targets a sustainability theme, declined 11.4% for 2022 through November, compared with a 14.8% decline for the global equities benchmark.

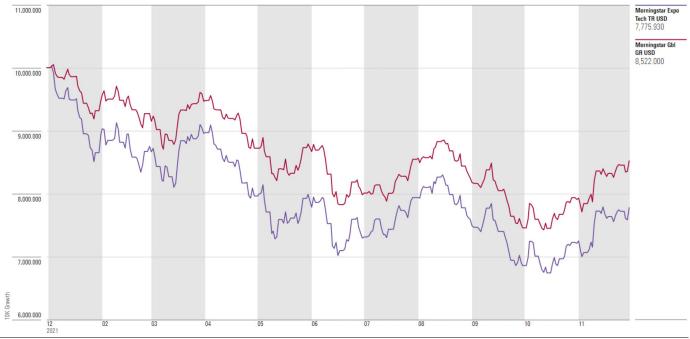
At the end of the day, any investment that deviates from the market portfolio will outperform in some market conditions and underperform in others. Just as the five years through 2021 undermined skeptics who dismiss sustainable investing as necessarily entailing a performance sacrifice, returns in 2022 have shown that "doing good" doesn't always lead to "doing well."

Lesson 4: Growth Themes Don't Always Grow

Identify a trend and invest in its beneficiaries. How can you lose? From cybersecurity to connected cities to blockchain, investments focused on themes tripled their market share in the decade that ended in 2021, according to the Morningstar Global Thematic Funds Landscape Report.¹⁰ Thematic investments possess far more intuitive appeal than esoteric factor strategies like "minimum volatility."

A bull market has helped. Consider the performance of the Morningstar Exponential Technologies Index, which includes 200 global stocks exposed to nine themes, including computing, healthcare innovation, and robotics. For the five years through the end of 2021, the index rose 171% in cumulative terms, versus a 97% advance for its global equities parent. But 2022 saw fortunes turn, as the index fell more than 22% through November 2022, as seen in Exhibit 9 below.





Source: Morningstar Direct. Year-to-date data as of Nov. 30, 2022

Another thematic index, the Morningstar Global Digital Infrastructure & Connectivity Index is down even more, having declined 25% in 2022.

Some thematic indexes, which have less exposure to technology have performed better. The Morningstar Global Food Innovation Index fell just 8% through November, well ahead of global equities.

10 Morningstar Global Thematic Funds Landscape 2022. Morningstar Manager Research. March 2022.

The struggles of many thematic portfolios in 2022 illustrates the challenges inherent to the approach. A successful thematic investment must get three bets right, as Morningstar Manager Research has argued:¹¹

- 1) Theme will materialize as expected.
- 2) Investable securities will benefit from the theme.
- 3) Beneficiaries will become good investments.

China's gross domestic product grew from \$3.4 trillion in 2007 to more than \$18 trillion in 2022. Yet the Morningstar China Index was essentially flat for the 15-year period through November 2022, while the Morningstar Global Markets Index gained 131% in cumulative terms over that span. China's economic growth was a powerful theme that did not translate into stock market gains.

In the late 1990s, the market identified an important theme, as the internet changed the way we all live and work. But successful internet business models had yet to emerge. Even great companies like Amazon.com carried valuations that implied unrealistic expectations. It took years for Amazon to regain its 1999 valuation and for companies like Google and Facebook to come to market.

The struggles of many thematic indexes in 2022 do not invalidate the themes in the long term or mean the wrong securities were selected. The Morningstar thematic indexes cited above use equity analyst insights to identify themes and companies poised to benefit from them.¹² Similar to the discussion of sustainable investments above, it points to the inevitability of performance cyclicality for any deviation from the market portfolio.

It also speaks to the importance of valuation. In the case of the Morningstar Exponential Technologies Index, a portfolio of overvalued growth stocks harmed performance in 2022. Trees don't grow to the sky.

Lesson 5: Private Markets Don't Only Go Up

One way to measure the boom in private market investing in recent years is the performance of the Morningstar PitchBook Listed Private Equity Index, which includes the shares of public companies focused on private assets (Blackstone, KKR, and Partners Group are top constituents). The index, which relies on data from PitchBook, a Morningstar company specializing in private markets, rose more than twice as high its public counterpart for the five years through 2021. As in many of the stories discussed above, 2022 saw a reversal of fortunes. The index fell twice as far as its parent. Even as private equity and venture capital funds continue to report strong performance, public markets sniff trouble ahead.

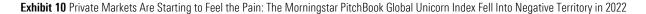
Measuring returns for private companies that are not marked to market is difficult, though the Morningstar PitchBook Global Unicorn Index and its regional carve-outs attempt to do just that. To value constituents such as ByteDance, Stripe, and SpaceX, the indexes employ a pricing model that considers

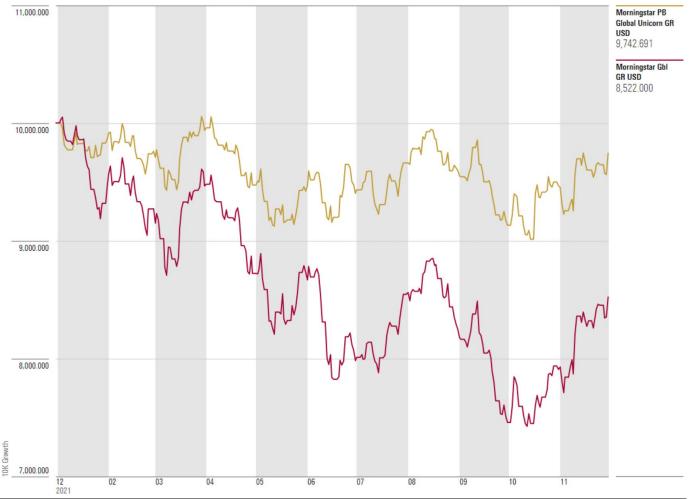
¹¹ Johnson, B. "Beware Thematic Funds' Siren Song." Morningstar. June 29, 2022.

¹² Lane, A. "Morningstar Thematic Indexes Offer Superior Thematic Purity." April 2022.

not just a company's valuation as of its last funding round, but comparable data from both private and public market peers. The indexes launched in late 2022 but have several years of simulated histories.¹³

The cohort of private companies with \$1 billion-plus valuations has lost some steam in 2022, with estimated valuations for the 1,244 companies in the global unicorn index showing the cohort slightly down nearly 3% through November 2022, as seen in Exhibit 10 below.





Source: Morningstar Direct. Year-to-date data as of Nov. 30, 2022.

Given that pricing is estimated, magnitude is less important than direction. The year has seen the highprofile crash of Klarna, whose 85% valuation haircut was reminiscent of the WeWork debacle, and the well-publicized blowup of cryptocurrency exchange FTX. Propping up index returns are massive fundraising rounds from companies like Shein, a Chinese fast-fashion business, and SpaceX, which saw

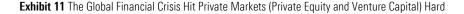
¹³ For more about the Unicorn Indexes, see "Harnessing Unicorns: Demystifying the venture capital market with the Morningstar PitchBook Global Unicorn Indexes." For more information on Morningstar's proprietary pricing methodology, see "What Are Unicorns Worth? A new approach to estimating the daily values of venture capital-backed companies."

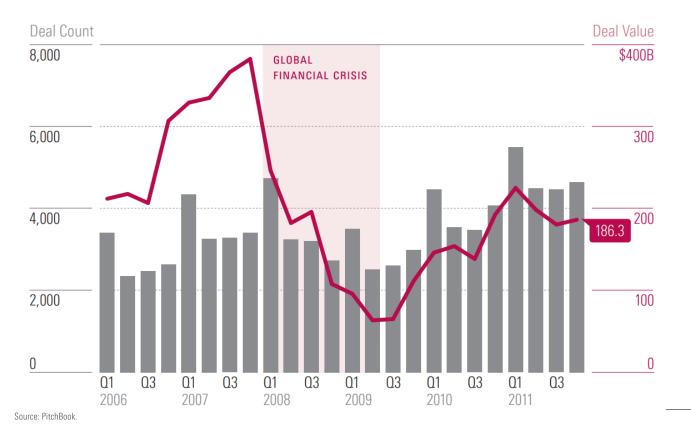
its valuation climb to \$127 billion in June. Whereas public markets can often be leading indicators, it can take time for private markets to reflect change.

Unicorn creation, a key metric, has slowed. The index's constituent count stood at 1,244 at the end of November 2022, up from 986 at the start of the year. In 2021, the global unicorn index saw its ranks swell from 574 to 986 by year-end. PitchBook observes that private market deal flow has slowed.

Headwinds include rising interest rates, potential recession, and public market struggles. Unicorns looking for an exit do not want to IPO in a down market. Many have cash on hand and are biding their time. But a reckoning may be imminent. "Next year we'll see companies that are forced to come back to market in an unforgiving environment," warns PitchBook senior analyst Kyle Stanford.¹⁴

There's historical precedent for a major slowdown in private-market activity. During the global financial crisis, deal flow ground to a halt as access to leverage tightened and credit spreads widened. According to PitchBook, private deal value declined by a factor of 10 between the fourth quarter of 2007 and the second quarter of 2009. The rebound in public markets that started in early 2009 was a lifeline to private assets. A more prolonged downturn could be painful.





14 Thorne, James. "Is it time to thin the unicorn herd?" PitchBook. Nov. 23, 2022.

But no matter the short-term outlook, structural factors mean private markets are likely to remain an important feature of the investment landscape. Regulation has made staying private more compelling. Many companies are keen to avoid the cost, disclosure requirements, and scrutiny of public markets. Raising funds in private markets is easier than ever thanks to more than \$11 trillion in assets in private equity, venture capital, and other private-market vehicles.

According to PitchBook data as of Sept. 30, 2022, \$3 trillion of that capital is considered "dry powder," meaning it has been allocated but yet to be deployed. Asset owners like pension funds and sovereign wealth funds commonly allocate 20%-plus to private assets. Crossover investors, including equity mutual funds, commonly hold stakes in private companies, and efforts are being made to broaden access to small investors. Even if we're in for a downturn in private markets, it's likely that an increasing number of future portfolios will feature both public and private assets.

Accept Uncertainty

Fortunes have been made, and many more lost in 2022. Short-sellers of technology stocks, oil traders, and early backers of new unicorns are shopping for yachts right now. Crypto enthusiasts, aggressive growth investors, and risk-averse bondholders are selling theirs. Many of us have had the painful experience of reviewing an investment account statement only to see a much-diminished portfolio.

Ultimately, one year is a short time frame in investing. For many, the best course of action is to tune out and hang on. Investment performance in 2022 may end up as a small blip on a long upward sloping chart. More important, perhaps, are the lessons that have been learned this year — about expecting the unexpected, preparing for the worst, and accepting how little certainty there is in investing.

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